Porterville Irrigation District Northwest Service Area Project

Request for Funding Opportunity Announcement No. R23AS00005

U.S. Department of the Interior, Bureau of Reclamation

WaterSMART Drought Response Program: Drought Resiliency Projects for FY2023



SINCE 1949

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Executive Summary

Date: June 15, 2022 **Applicant Name:** Porterville Irrigation District (Category A Applicant) **City, County State:** City of Porterville, County of Tulare, California

Project Summary

The Porterville Irrigation District (PID or District) in Porterville, Tulare County, California is applying for federal funds from the USBR WaterSMART Drought Resiliency Grant Program FY2023 (R23AS00005) as a Category A applicant under Funding Group I, Tasks A. The District intends to construct the Northwest Service Area Project (Project). The Project is supported by neighboring irrigation districts, Eastern Tule Groundwater Sustainability Agency (ETGSA), and local landowners and residents because it is a critical drought relief project. Tulare County has experienced a variety of drought impacts, most recently in 2012-2016 and 2020-present, where surface water and groundwater supplies are in a severe shortage. Project construction will increase the capacity and reliability for an area within the District boundary that currently does not have the infrastructure for surface water deliveries. Surface water deliveries to this new service area will allow PID to utilize more of its Friant Division Central Valley Project (CVP) contract water supply instead of transferring water out of the District. This Project supports the ETGSA Groundwater Sustainability Plan (GSP), a groundwater management planning document required under the California legislation known as the Sustainable Groundwater Management Act (SGMA) of 2014 and must consider various hydrologic periods and sets a plan to provide for sustainable groundwater management through wet and dry (drought) cycles over a 50-year planning life. The District is seeking to implement this Project due to its conjunctive use ability by increasing surface water use and groundwater recharge in wet water years to bolster and sustain groundwater for drought periods when all users of water (domestic, agricultural, and municipal) are reliant on the groundwater supply. By constructing surface water infrastructure in an area that currently does not have access to surface water, the District will gain in-lieu groundwater recharge of approximately 840 acre-feet per year (AFY). Conjunctive use for this Project is developed through what is known as in-lieu recharge. In-lieu recharge is one of the most effective methods for recharging groundwater supply as when surface water is being delivered it allows groundwater pumping wells to be turned off leaving a 1-to-1 ratio of groundwater in storage to the amount of surface water delivered. This stored groundwater can then be saved for drought periods, thus having a more resilient supply for all beneficial users within the District.

Project Duration

Project construction on this non-Federal facility will commence in 2024 following completion of the Project design, environmental compliance, and securing any necessary permits. The estimated start of the final design, environmental compliance and permits will begin following anticipated March 2023 award date and take approximately 12 months. The Project construction is anticipated to take approximately 6 months and estimated construction start in June 2024 with work outside of operating irrigation channels and be completed at the end of December 2024 ahead of the Funding Category 1 deadline (March 2025).

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Project Location

The Project is located in Tulare County, CA. (Latitude: 36.113834°, Longitude: -119.1340408°). Google Map Link



Figure 1 Project Location and Service Area

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Technical Project Description

PID is proposing to build a new surface water distribution facility in an area of the District that currently does not have infrastructure to receive surface water deliveries. Increasing the District's serviceable area that can take surface water deliveries will allow PID to be more resilient to drought conditions. The Project will allow the District to utilize more of its Friant Division CVP contract water supply instead of transferring water out of the District. PID, and potentially other Friant districts, to capture additional wet year water supplies available as Section 215 water, Uncontrolled Season, Class II contract entitlement, or as \$10 RWA (Settlement Article 16(b)) water and help to offset water supply impacts caused by the San Joaquin River Restoration Settlement. This portion of the District will now be able to conjunctively use the water supplies available, by using surface water in wet hydrologic cycles to effectively recharge the groundwater aquifer in-lieu of pumping to have a more reliable groundwater supply in drought cycles when all users in this region of California is reliant on groundwater for their supply.

A preliminary pipeline drawing is included in . The Northwest Service Area will be a new service area serving approximately 675 acres within the PID boundary that has been entirely dependent on groundwater for all its water use as this are currently does not have access to surface water. The proposed Project would construct a pipeline along the Road 196 alignment between the Lower Tule River Irrigation District (LTRID) #4 Canal and Avenue 176 north of the Tule River in Tulare County, northwest of the City of Porterville. The pipeline is intended to connect to the Porter Slough near the north end of the service area and run south approximately one-third mile. PID can divert its surface water supplies (both CVP water from the FKC and Tule River supplies) to the Porter Slough. The facility would operate by gravity diverting from the Porter Slough. The design capacity for the Northwest Service Area facility is approximately 10 CFS. The connecting facility in the Porter Slough is anticipated to be a reinforced concrete structure outfitted with a control gate and flow measurement device. There is an existing check structure in the Porter Slough, near the connection to the LTRID #4 Canal. The proposed turnout would operate from this checked water surface elevation. The pipeline, currently estimated at 1,750 feet in length, is anticipated to consist of 27-inch diameter PVC pipe. This project may require clearing and grubbing of about 1 acre. The pipeline will have a minimum cover depth of three (3) feet. There is one (1) road crossing at Avenue 176. Turnout facilities along the pipeline will be provided as needed, with most coming near the southern end of the pipeline at a wet well, or standpipe style, connection just south of Avenue 176.

Construction activity for this Project can be completed in one phase with a contractor anticipated to start in mid-2024. Construction activity will likely start at the southern end of the pipeline at the wet well location and then move north along the Road 196 alignment towards the Porter Slough. After setting the turnout, the contractor will be able to lay pipe along the alignment in segments depending on land use during the time of construction along the alignment (i.e. if a crop is about to be harvested, construction will wait until after harvest). The connection to the Porter Slough is anticipated to occur in the latter months of the construction window after the irrigation season and Porter Slough is dry.

Construction activities are anticipated to be accomplished with large earthmoving equipment appropriate for this type of work such as graders, scrapers, loaders, excavators, backhoes, concrete trucks, pumper trucks, water trucks, hauling trucks, and dump trucks.

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Figure 2 Preliminary Northwest Service Area Alignment

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Performance Measures

The key performance measure will be the amount of water better managed for use within the District. Records of water diverted into the delivery system for irrigation or recharge purposes will be compiled and tracked annually. The total volume of water, tracked in acre-feet per year (AFY), will be measured through meters provided at the diversion from Porter Slough as well as individual turnouts. Meters for these applications typically have a $\pm/-5\%$ accuracy.

A secondary performance measures will be realized in the form of improved groundwater levels within the District. Additional water delivered within the District (for irrigation or recharge) will reduce the dependence on groundwater pumping and allow for recovery of groundwater levels. Depth to groundwater readings are and will be regularly measured throughout the District for the semi-annual District groundwater mapping. The information gathered will be regularly evaluated by the District to determine the impact of deliveries.

Evaluation Criteria

Evaluation Criterion A—Project Benefits (30 points)

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

The Project would allow water supplies from the PID's contract with the Bureau of Reclamation (USBR) contract to be better used within the District's Boundary's. The Project will build long-term drought resilience by providing PID's customers in this aera of the District with access to surface water. These customers have previously been entirely dependent on groundwater. Thus, this Project will help to reduce the strain put on a critically over drafted groundwater aquifer as well as improved operational efficiency, improved water quality, and subsidence mitigation.

The District has been managing CVP contract supplies since the 1960s. The District will be managing surface water supplies for decades to come. This Project will provide benefits for at least the service life of the pipeline infrastructure, a minimum of 30 years. With proper maintenance and repairs, the Project will likely provide long-term drought resiliency benefits through more effective ability to conjunctively use surface and groundwater supplies for decades to come.

Will the project make additional water supplies available? 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 (e.g., if the project captures flood flows in wet years, provide the average benefit over ten years including dry years). What percentage of the total water supply does the additional water supply represent? How was this estimate calculated?

The Project will not make any additional supplies available to the District, as the Project provides for the ability to better utilize the supplies available to PID. The District has a contract with the Bureau of Reclamation (USBR) (who holds appropriative water rights on the San Joaquin River) to supply water from the Friant Division of the Federal CVP through the Friant-Kern Canal. PID's Friant water supply contract provides for the annual delivery of 15,000 AF of Class 1 (firm) water and up to 30,00 AF of Class 2 (non-firm) water. Use of PID's Tule River supplies is not being included in the analysis supporting this application and thus is not part of this application.

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

While the Project does not make additional supplies available to the District, the Project will make additional water supplies to the PID customers located within the Northwest Service Area. These customers have not previously had access to surface water as there is no District infrastructure in the area. In light of The Sustainable Groundwater Management Act of 2014, or SGMA, requiring sustainable groundwater management by the year 2040, having an additional water supply is vital to the success and livelihoods of those within this service area.

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)? If so, how will the project increase efficiency or operational flexibility?

The Project will primarily increase operational flexibility for the District by creating more conveyance capacity to move and delivery surface water supplies. Increasing the District ability to make surface water deliveries will allow PID to utilize their Friant Division CVP contract water supply more efficiently instead of transferring water out of the District. It will also allow PID, to capture additional wet year water supplies available such as Section 215, Uncontrolled Season, Class II contract entitlement, or as \$10 RWA (Settlement Article 16(b)) water. Additionally, more conveyance capacity can support some system redundancy that can provide operational flexibility and reliability.

For the local landowners within this service area, the Project would provide new access to surface water in areas that are entirely dependent on groundwater. This new supply will help to augment the burden on an already critically overdraft aquifer and improve resiliency to changing climate conditions.

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).

Approximately 840 AFY is estimated to be better managed by the Project once implemented. This estimate is derived from an evaluation of the existing crop demand within the Northwest Service Area and evaluating surface water supply from PID's Friant Division CVP contracts.

The demand for the 675-acre Northwest Service Area was estimated based of crop type (primarily permanent tree orchards) and ET evapotranspiration for specific crops in the region. The total demand for the NWSA was calculated at 2,540 AFY. Currently, the entirety of this demand is being met by pumping wells and further depleting the aquifer.

The quantity of water that will be better managed was estimated based on a simulation of historical Friant Division CVP Class I, Class II, Section 215, and \$10 RWA (Settlement Article 16(b)) water supplies available to PID when considering San Joaquin River Restoration Settlement reductions as modeled by Steiner (excerpts within **Appendix A**). Based on PID operations for surface water delivery, it was assumed that 50% of the Northwest Service Area demand could be met when

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PID's Class I allocation was 75% or greater. To summarize, when Class I allocation is at 75% or above, then it is assumed 1,270 AF can be utilized within the Northwest Service Area.

Evaluating water better managed over a 10-year periods is largely reliant on the hydrology of the period selected. This region of California regularly experiences large swings in wet and dry periods leading to the average annual surface water supply available fluctuating depending on the occurrences of greater than 75% Class I allocation within a wet, average, or dry 10-year period. The table below summarizes some of the simulation results from **Appendix B** into 10-year and long-term ranges for the water supply and recurrence interval within those periods. The period types were developed based on the Percent Water Year for the San Joaquin River, which supplies Millerton Lake and the Friant Division CVP supplies. As seen in the table below, when examining the wet, average, and dry 10-year cycles, there is significant fluctuation in average annual supplies, ranging from 50% of the Northwest Service Area demand being met in all 10 years during wet periods to as little as only meeting 50% of demand in 30%, or three (3) years in 10 during dry periods. Averaging these 10-year periods starts to align with the long-term averages seen over 30 and 50 years. Therefore, the Project is estimated to yield approximately 840 AFY for approximately 8,400 AF over an average 10-year period.

Period Type	Years Covered	Water Available (AFY)	Recurrence of Class I >75%	Percentage of Recurrence
Most recent 10-yr. Wet Period	1997-2006	1,270	10	100%
Most recent 10-yr. Avg. Period	2002-2011	1,143	9	90%
Driest 10-yr. Period	2007-2016	508	4	40%
Latest 10-yr. Period	2012-2021	381	3	30%
Last 30 Years	1992-2021	889	21	70%
Last 50 Years	1972-2021	838	33	66%
Average		838		66%

Table 1 Water Better Managed Summary

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

With completion and implementation of the Project, PID will be able to add an additional 840 AFY to the total average water supplied within the District. PID delivers an average of 12,140 AFY to its customers. The average additional delivery by the Project represents approximately 7% of the total average annual delivery. This could swing to as high as 10% in wet periods and as low as 3% in dry periods when comparing to the table above.

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

The Project adding additional supply and better managing supplies improves the reliability of groundwater for use during drought periods by agriculture and local groundwater dependent communities. Better management will come in the form of more water diverted within PID. More Friant CVP water delivered into the District (and Tule Groundwater Subbasin) will provide

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significant positive impacts for many beneficial users. Rural severely disadvantaged communities (**SDACs**), such as City of Porterville, the communities of Poplar-Cotton Center, Woodville, who rely solely on groundwater for drinking water supplies, look to the neighboring irrigation and water districts to build the critical water infrastructure to sustain the conjunctive-use groundwater aquifer. Through sustainable groundwater recharge and recovery programs, the aquifer can provide long-term assurance and drought resiliency for all beneficial users and uses of groundwater within the region. The qualitative significance of Project benefits is also demonstrated by the included Letters of Support from Pixley Irrigation District (**PIXID**), Lower Tule River Irrigation District (**LTRID**), Teapot Dome Water District (**TPDWD**), and the Eastern Tule Groundwater Sustainability Agency (**ETGSA**).

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

No new information will be made available to water managers as part of this project. There will be more data collected related to surface water delivery within the District that will be tracked with the District's existing system.

If the proposed project includes any of the following components, applicants need to provide the additional information requested below for the specific project type. This additional information will be used in evaluating and scoring the proposal.

The items regarding Wells and Water Marketing Tool, or Programs do not apply. This Project does not include new wells or a water marketing toll/program.

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

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 page count for the application.

PID is a partner in two large planning efforts that seek to plan and prepare for drought scenarios and climate change. These efforts are Integrated Regional Water Management (**IRWM**) planning and developing a Groundwater Sustainability Plan (**GSP**) in response to the 2014 SGMA Legislation. As PID is a conjunctive use district and heavily relies on groundwater, these plans function as PID's drought contingency plans. Links to these two plans are located at the following web locations:

- ETGSA GSP: <u>https://www.easterntulegsa.com/gsp/</u>
- Tule River Basin IRWM Plan: <u>https://www.tuleirwmp.com/report/</u>

Relevant sections of the GSP are attached in **Appendix C** and relevant sections of the IRWM Plan are in **Appendix D**

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.

Integrated Regional Water Management Plan. In January 2019, PID as a member of the Tule River Basin IRWM Group submitted an updated IRWM Plan to the California Department of

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Water Resources (**DWR**). Climate Change (and likewise drought) is a required component for the updated IRWM Plans. Section O of the Tule River Basin IRWM Plan is the Climate Change Section and is included in **Appendix D**The full document can be made available upon request.

Groundwater Sustainability Plan. As part of SGMA Legislation, groundwater subbasins covered by Groundwater Sustainability Agencies (**GSA**) must develop GSP(s) that plan to bring groundwater subbasins to sustainability by 2040, which includes evaluating the effects of hydrology and climate change going forward. A requirement of the GSPs is to evaluate effects of climate change over the planning window. PID is a member agency on the governing board of the ETGSA within the Tule Subbasin. The Tule Subbasin GSAs submitted their GSPs in January 2020 and are currently working through revisions to comments provided by DWR. The revisions are due at the end of July 2022. The revisions are largely related to process for setting Minimum Thresholds for key sustainability indicators in the area. The water budget, climate change evaluation, and adaptive management components of the ETGSA GSP are not currently needing revisions The ETGSA GSP references a Tule Subbasin Setting Document, which all Tule Subbasin GSAs partnered in developing, that describes the analysis and results to modeling the Water Budget and the influence of climate change. This section of the Tule Subbasin Setting is included in **Appendix C**

Does the drought plan contain drought-focused elements including a system for drought monitoring, sector vulnerability assessments related to drought, prioritized mitigation actions, and response actions that correlate to different stages of drought?

Yes, the Tule River Basin IRWM Plan includes a vulnerability assessment evaluating the vulnerability of climate change and drought impacts on a number of sectors, such as water supply, flooding, ecosystems and power. Section O.5 of the Tule River Basin IRWM Plan included in **Appendix D** discusses these vulnerabilities and includes strategies for managing resources.

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

Yes, both the plans were or are being developed with input from multiple stakeholders. The IRWM Plan was prepared amongst several public water management agencies, including PID, local community representatives (i.e. City of Porterville and Poplar-Cotton Center), other special interest groups (i.e. environmental stakeholders) in the region. The GSP was developed with stakeholder input through public meetings during the planning process and a public comment period on the draft document before submitting to DWR. ETGSA GSP Section 8 Notices and Communication provides an overview of this process to coordinate with stakeholders at the local level. Also included with this GSP Section, as GSP Appendix 8-A, is the Communication and Engagement Plan further detailing the efforts. Both processes have been collaborative with many public meetings to receive input.

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

Yes, both the IRWM Plan and GSP consider climate change impacts and drought.

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

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The proposed Project serves to create new surface water delivery capability and bolster PID's efforts to efficiently deliver water while operating its system. With the improved distribution system the District will be better suited to manage drought and climate change impacts by making better use of its surface water supplies in wet years to bolster groundwater supplies in drought periods when it is the only source of supply the all users within the area. Both the IRWM Plan and GSP include discussion on the priority of expanding or modifying key water infrastructure features within PID to improve drought resiliency and overall water supply reliability.

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

Both the IRWM Plan and GSP refer to project types broadly as different projects now and in the future may meet this priority project types. The proposed Project is consistent with these identified actions.

- 1. In the IRWM Plan, Section G includes a table of different project types by the different member agencies. This specific Project was not developed for PID at the timing for inclusion in the Projects list in the IRWM. The IRWM list was derived in 2018, the District began evaluating the Northwest Service Area in 2019. There is, however, a new distribution system project included for PID within the Tule IRWM projects list included in **Appendix D**. This proposed Project has similar merits to the project included in that it provides additional ability for PID to utilize its surface supplies within the District.
- 2. In Section 7.3 Appendix C of the ETGSA GSP there are major project type categories discussed. This proposed Project aligns with the second and third project types discussed, Surface Water Development and Managed Aquifer Recharge and Banking. Additional detail on these two project types is provided in Sections 7.3.2 and 7.3.3, respectively. In Section 7.3.2 an example of a surface water development project is infrastructure development to "increase capacity of existing or develop additional surface water delivery systems to maximize ability to capture flood waters and any available water for import during above average hydrology periods." This proposed Project is right in line with that objective.

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

Both the IRWM Plan and GSP identify goals that the proposed Project would serve once implemented. In the IRWM Plan includes two goals:

- 1. Expand regional response to climate change through mitigation and adaption strategies
- 2. Work toward achievement of sustainable balanced surface and groundwater supplies

The GSP, and intent of the SGMA legislation, is consistent with the second goal listed, as it strives to reach sustainable groundwater management by 2040. Implementing the proposed Project would assist the District in meeting these goals by improving the ability to better manage surface supplies when they are available for use within the District in order to provide a more reliable and resilient water supply **Appendix C**

How is the proposed project prioritized in the referenced drought plan?

The IRWM Plan and GSP do not specifically prioritize the projects listed within. However, a project type being one of only a handful that is listed or expanded upon within these plans shows

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that projects that fall within these category types are priority projects for the District, ETGSA, and Tulare River Basin IRWM Group. Thus, the proposed Project is believed to be a prioritized project meeting the goals of planning and preparing for climate change impacts and drought resiliency.

Evaluation Criterion C— Sustainability and Supplemental Benefits (15 points)

1. Climate Change:

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

Yes, the Project provides PID more capacity within its distribution system. More ability to divert and manage water supports flood protection in wet years not only for the local Tule River watershed but also on the Friant-Kern Canal when the system is in flood release, also known as Uncontrolled Season, from Millerton Lake.

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

The Northwest Service Area to be served by the new Project has been entirely reliant on groundwater for its supplies. This has power demand by individual landowner wells to pump and supply irrigation demand. Through development of the Project, landowners will be able to shut off their groundwater wells and receive surface water. Many of the landowner turnouts are envisioned to be served by gravity and thereby reducing energy demand.

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

The Project is currently envisioned to have manually operated gates. However, in the future, PID may opt for remote control via a SCADA system. Controls on the Project (i.e. gate operation at the Porter Slough turnout) have the option to be powered via solar panels.

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

While not the primary benefit of the Project, the Project will support the reduction of air and water pollution. By turning off groundwater wells with the delivery of surface water, emissions for power generation and consumption will likely be reduced. Additionally, supplementing the Northwest Service Area with surface water from the Friant-Kern Canal, generally considered a clean surface water supply, is envisioned to improve local groundwater quality over time as the Project is implemented.

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

Development and completion of the Project provides for a more diverse water supply to the Northwest Service Area. A more diverse and reliable water supply will allow the agricultural practices to be more sustainable and keep the planted crops (primarily permanent trees) in place which provides for sequestering carbon through their transpiration process.

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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?

Maintaining the agricultural practices in the area serves as a way to promote and maintain healthy lands, soils, and water supplies. The primary benefit of the Project is the ability to protect water supplies by bringing in additional surface water to augment supply and saving the groundwater supply for when surface water is scarce. A reliable water supply will keep the land actively managed rather than being left dormant or fallow where invasive weeds and pests can take hold and cause lasting negative impacts to the area.

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

The Project is located in an area where land subsidence has been a growing issue due to an overreliance on groundwater. Subsidence is an occurrence when the land surface sinks (subsides) due to fine material layers, such as clays, in the aquifer become unsaturated and condense. Lowering ground surface levels can potentially result in reduction of flood protection if banks, levees, or other flood containing facilities drop lower than flood water elevations. Supplementing water to the area reduces the dependency on groundwater pumping that may cause subsidence as well as supplementing the groundwater aquifer with recharge (direct or in-lieu) to reduce or stop subsidence impact.

2. Disadvantaged or Underserved Communities: Please describe in detail how the community is disadvantaged or underserved based on a combination of variables.

The Project will provide benefits those within this Northwest Service Area and to the broader surrounding area which includes the City of Porterville to the east, and communities of Plainview, Woodville, and Poplar-Cotton Center to the north, west, and south, respectively. While the new surface water facility will only deliver water to this Northwest Service Area, all in the surrounding area will benefit from reduced groundwater pumping and a more resilient water supply. California Office of Environmental Health Hazard Assessment provides datasets through a tool known as CalEnviroScreen that indicates various population impacts and/or burdens within a Census Tract. The reviwer is invited to review the data at the following link. Due to page restriction only a couple figures will share showcasing the high prevalence of Disadvantaged and Underserved Communities in the area of the project that will receive benefit. The Project is located in Census Tract 6107003300 and covers poverty, unemployment, housing burden, pollution burden, linguistic isolation, and housing burden to list a few. The scores depicted are percentiles, the higher the percentile the higher the impact. Via this dataset it is believe that this Project meets the intent of E.O. 13985 for benefiting underserved communities.

https://oehha.ca.gov/calenviroscreen/report/calenviroscreen-40

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Figure 3 CalEnviroScreen Population Characteristics

8 3	CalEnviroScreen 4.0 Indicator Maps	Results Map
Pollution Burden +	Exman ville Exetor	om to
Ozone PM2.5	Pollu Cent	tion Burden Results 🗗 🔀
Drinking Water Contaminants Children's Lead Risk from Hous	Poll	ution Burden: 82 ulation: 8019
Pesticide Use Toxic Releases from Facilities Traffic Impacts	Cale	inviroScreen 4.0 Percentile: 89
Cleanup Sites Groundwater Threats	Ozo PM Dies Pest	ne: 85 2.5: 93 Jel PM: 21 Joides: 87
Population Characteristics	Toxi Trafi Drin Lead	c Releases: 34 fic: 8 king Water Contaminants: 100 1 in Housing: 73
Asthma Cardiovascular Disease	Tiplen Porterville Clea Average 144 100 Porterville Last Porterville Last	anups: 17 undwater Threats: 94 ardous Waste: 0 stord Water 12
Low Birth Weight Education		alled Water. 12
Housing Burden Linguistic Isolation Poverty	Puley	State and Contract
Unemployment Fresh	o County Dept. PWP, Bureau of Land Management, Esri, HERE, Garmin, USGS, NGA, EPA, USDA, NPS	Powered by Esri

Figure 4 CalEnviroScreen Pollution Burden Data

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3. 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 directly support tribal resilience to climate change and drought as there are no direct tribal users in the Northwest Service Area.

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

While the Project does not directly support tribal resilience. The Tule River Yokut Tribe has a reservation in the local vicinity of the Project and has long standing ties to the area. Improving water supply reliability, including added water supply delivered to the region by the CVP Friant Division provides linkage between Reclamation activity and a region with tribal activity.

4. Environmental Benefits:

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

The Project does not improve the climate change resiliency of a wetland, river, or stream or will it provide benefits to fisheries or other threatened habitats. However, the Northwest Service Area is in the flightpath for migratory birds that pass through the area during migration. Maintaining trees and a healthy planted area provides places for migrating birds to rest and find food and water.

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

It is not feasible to precisely quantify the number of migrating birds that would benefit from a healthy planted region due to various complexities needed to be accounted for (species, area covered, etc.). However, a flourishing area with a reliable surface water supply is expected to have tangible benefits for migrating birds coming to the area.

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

The Project is not likely to reduce the chances a species from being listed as endangered or threatened or improving a species status to have its listing removed.

5. Other Benefits: Will the project address water sustainability in other ways not described above? For example: Will the project assist States and water users in complying with interstate compacts?

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

Yes, the Project will support the regions' ability to protect the Friant-Kern Canal which has experience capacity reduction due to subsidence impacts along its alignment. The Friant-Kern Canal is a facility of Statewide importance as it deliveries critical water supply within the

Porterville Irrigation District - Northwest Service Area Project

California Central Valley. Increasing the ability to supply surface water and reducing pumping in in this region will assist in protecting this facility.

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

Yes, this Project will benefit multiple uses/users in the area. Agriculture in the Northwest Service Area will have the ability to receive surface water, reducing the dependence on the groundwater supply and making it more reliable. Also within the region are rural domestic drinking water users, the City of Porterville (east) and the community of Woodville (west). All of these users are reliant on groundwater for their drinking supply needs. Developing groundwater resiliency for drought conditions by bringing in surface water greatly benefits these drinking water users.

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

Yes, this Project and others like it will help PID and other members of the Eastern Tule GSA achieve sustainable groundwater management of the local groundwater aquifer as directed by the California Legislation, The Sustainable Groundwater Management Act of 2014. PID and the Eastern Tule GSA members will be working to develop Projects and Actions that better utilize or augment surface water supplies, such as this Project, and reduce the demand on water supplies.

Evaluation Criterion D—Severity of Actual or Potential Drought Impacts to be addressed by the Project (15 points)

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

Drought conditions impact all users in an area. The recent drought (2012-2016) saw severe impacts to drinking water supplies for local communities, lost agricultural production, and stress on wildlife habitats. Following a wetter period from 2017-2019, the local area is again facing drought as the 2020-2022 period has had some critical dry years similar to those in the previous drought. Additionally, weather forecasting suggests more instances of prolonged drought due to climate change impacts. A 'No Action' alternative will no longer be acceptable as these would lead to more dependence on groundwater, which has historically been in overdraft and thereby becoming less resilient with each passing year. Implementing projects, such as the proposed Project, will strive to better utilize surface supplies when available to provide for a more resilient groundwater supply for times of drought.

What are the ongoing or potential drought impacts to specific sectors in the project area if no action is taken Whether there are public health concerns or social concerns associated with current or potential drought conditions).

There is significant health and social concerns with potential drought conditions in the Project area. Local communities, many of which are designated as disadvantaged, are solely dependent on groundwater for their drinking water supply. During drought periods there is heavier reliance on groundwater to meet demands, which generally causes groundwater level declines. Groundwater levels declining too low can lead to dry supply wells. For communities reliant on groundwater this can lead to the need to truck in water. This was an unfortunate reality in Tulare

Porterville Irrigation District - Northwest Service Area Project

County during the recent 2012-2016 drought and is again becoming a reality in the current drought being faced as groundwater levels are declining to (or beyond) those reach in the previous drought.

Beyond local community drinking water supply, many of the local community residents work in the agricultural industry as field laborers. Persistent and/or future drought conditions could result in job losses if there is not a reliable water supply to support productive farming operations. This could be devastating to an already disadvantaged community.

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

Ongoing or potential environmental impacts of drought to species or habitat are unknow at this time. While the specific impacts on the environment are largely unknown in the Project area, generally, increased irrigation leads to increases in vegetation which can provide for larger and more robust habitats for species in the area as well as reduce potential impacts on greenhouse gasses due to the increased vegetation. This increased vegetation can also help to lower the heat index by maintaining ground cover. Additionally, the offset of groundwater pumped by the Project will assist with the declining groundwater levels creating more sustainability in the primary aquifer and creating more efficient groundwater pumping, thereby creating less greenhouse gas emissions used to pump water from the lower groundwater levels that would be present without the water recovered from the Project.

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).

The local agriculture industry is the primary economic driver in the area as it is the largest land use and user of water. Reviewing data from the Tulare County Agricultural Commissioner, gross production value in Tulare County for 2013 was \$7.8 Billion. In 2016, after the worst part of the recent drought, gross production value was \$6.4 Billion, a loss of 18%. 2017 and 2018 saw improvement in the gross production value at \$7.04 and \$7.2 Billion, respectively (Appendix E). However, this valuation still did not meet pre-drought economy. The latest Agricultural Commissioner Report available is for the 2020 year and estimates the total gross production value from 2019 (\$7.5 Billion). The hardest hit sector was the fruit and nut commodities which saw nearly 16% reduction in value. Link to recent Tulare Ag Commissioner reports: Crop Reports 2011-2020 - Agricultural Commissioner/Sealer (tulare.ca.us)

The main crop in this proposed Northwest Service Area are nut trees, specifically almonds and walnuts. As the area is currently experiencing drought conditions again, and likely will see wet and dry hydrologic cycles, future groundwater levels will be susceptible to significant declines. For some groundwater users, this may mean wells may produce less water and/or go dry and/or loss of crop production. There is an economic loss associated with having to fallow crops and the cost depends on the crop type. This fallowing could result in lasting impacts beyond just the year in which a crop is fallowed, particularly for tree or other permanent crops. This is due to the time it takes for these types of crops to mature and become crop producing. This could be three to five years, depending on crop type/varietal. Referring back to the 2020 Tulare County Ag Commissioner Report linked previously (excerpts in **Appendix E**), the cost per acre to fallow

Porterville Irrigation District - Northwest Service Area Project

almonds and walnuts in the proposed Northwest Service Area is summarized in the table below. This table does not include the cost of the land, but the valuation given to the commodity over its acreage within Tulare County. To account for the time lag need for maturation and production, the loss of crop \$/acre would then be multiplied by the referenced three to five (3-5) years depending on crop type/varietal. The summary in this table assumes 1 year of fallowing plus a conservative 3 years to maturity, the extended loss \$/acre is shown below:

Table 2 Estimate Crop Loss (\$/Acre)

CROP	VALUE	ACRES	\$/ACRE	\$/ACRE OVER 4 YRS
Almond	338,734,000	97,900	\$3,460	\$13,840
Walnuts	111,930,000	86,100	\$1,300	\$5,200

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

Another side effect that has risen in recent years in response to recent drought conditions is subsidence. During the recent drought, subsidence impacts were experienced in the ETGSA as well as along the Friant-Kern Canal largely between the Tule River south to Deer Creek. Subsidence can impact the water supply for PID and the surrounding area in two ways: 1) lost groundwater aquifer storage space and 2) reduction of surface water conveyance capacity in the Friant-Kern Canal. According to InSAR data available through the California DWR, during the period from June 2015 through January 2022, the area around the Project within PID experienced 0.5-1.0 feet of subsidence and the area around the Friant-Kern Canal experienced 1.0-3.0 feet of subsidence. Resulting loss of groundwater storage and conveyance capacity has increased tensions among many stakeholders in the southern Central Valley.

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

The Project area is currently experiencing an exceptional drought according to the United States Drought Monitor. Also, according to the United States Drought Monitor there have been three longer term drought periods since the year 2000. The period from 2007 to 2009 saw much of the area in severe drought conditions. The period from 2012-2016 was very severe with extreme and exceptional drought conditions from 2014-2016. Currently, the area has been experiencing worsening drought conditions since 2020 where it started as moderate drought and has been worsening to extreme and exceptional intensity. The following figures depict the current drought conditions for California (with Tulare County circled) and historical drought occurrence and intensity for Tulare County since 2000.

Porterville Irrigation District - Northwest Service Area Project



Figure 5 US Drought Monitor for California (June 2022)



Figure 6 Percentage of Drought in Tulare County since 2000

Describe any projected increases to the severity or duration of drought in the project area resulting from changes to water supply availability and climate change. Provide support for your response.

According to the Fourth Climate Change Assessment developed by the California DWR water resources (surface and groundwater) are projecting to be more variable with prolonged periods of drought (<u>http://www.climateassessment.ca.gov/regions/</u>). PID is in the San Joaquin Valley Region and according to the Assessment surface water will be available over shorter periods and will likely come earlier in the year. This can severely impact reservoir operations and meeting water demands when they are highest, such as summer irrigation for agriculture. The ETGSA Address climate change and future water availability in project water budget section or Tule Subbasin **Appendix C.**

Porterville Irrigation District - Northwest Service Area Project

Evaluation Criterion E—Project Implementation (10 points)

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

Work on preliminary planning and design began in early 2019 and final design efforts are expected to begin after the grant award. It is assumed that contract will be signed on March 31, 2023, as stated in the grant funding announcement. It is estimated that all work will be completed by the end of December 2024, which provides a three-month buffer ahead of the two-year contractual deadline of March 31, 2025. A detailed schedule is provided in **Appendix F**

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

PID will work cooperatively with the County to secure any required permits, incorporating the final design plans and specifications. In addition to the USBR NEPA/cultural resources compliance. It is anticipated that the District will need to file applications with the respective agencies for the permits listed below.

- CEQA/NEPA Compliance. No CEQA or NEPA has been started for this project yet but will begin upon the grant being awarded.
- Water Quality Certification through local water quality control board
- Storm Water Pollution Prevention Plan (SWPPP) through local water quality control board
- Dust Control Plan (DCP) through local air control board
- Potentially a Lake and Streambed Alteration Permit (LSA) through California Department of Fish and Wildlife

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

Following is a description of work completed to date on the project. All of this work has helped to validate the feasibility of the project, provided more detail on project features, operations, and project benefits, and provided sufficient detail for a more detailed cost estimate.

Hydrologic Analysis of Available Surface Water Supplies. The available surface water supplies that would potentially be better used and manage within PID. This was accomplished to provide an estimate of average water available in a region that experiences dramatic swings between dry and wet years.

Preliminary Project Design. A feasibility study was completed in early 2019. Hydraulic design for different pipeline alternatives was started during the feasibility process. A preliminary pipeline alignment has been drafted. The feasibility study can be found in **Appendix G**

Preliminary CEQA/NEPA Analysis. PID's consulting engineer has not started the process yet but will begin assessments of environmental needs once an award determination has been made.

Porterville Irrigation District - Northwest Service Area Project

Proposal for Final Design. The District's engineering consultant, Provost & Pritchard Consulting Group, will submit a proposal for final project design and environmental documentation once the grant has been awarded.

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

No new policies or administrative actions are required for implementing the Project. The Project serves to construct a new conveyance facility for better use of water supplies within the District. PID has constructed similar projects over the last several years.

Evaluation Criterion F—Nexus to Reclamation (10 points)

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

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

PID is a long-term contractor of the CVP Friant Division. PID's Friant water supply contract provides for the annual delivery of 15,000 AF of Class 1 (firm) water and up to 30,00 AF of Class 2 (non-firm) water. This contract began in 1966, with subsequent renewals. PID has operated as Contractor of Project Water from the Friant Division of the CVP with the USBR per the following contracts:

- Contract No. 175r-4309-D (C1)
- Contract No. 175r-4309-D (C2)

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

PID is a Reclamation contractor and the CVP supplies are utilized directly by the District and to effect direct delivery, water transfers and/or exchanges.

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

Yes, the Project will benefit Reclamation as the majority of the water supplied to this new facility will come from the Friant-Kern Canal. PID and Reclamation have partnered on similar service area projects in the past to better manage Friant supplies and benefit local landowners. Previous efforts include:

- 1. Wood-Central Ditch Pipeline Project. Funded in 2013 and finalized in 2016
- 2. Service Area 2 Pipeline Project. Funded in 2016 and finalized in 2017

Is the applicant a Tribe?

No, Porterville Irrigation District is not a Tribe.

~~~~ END OF TECHNICAL PROPOSAL AND CRITERIA SECTION ~~~~

Porterville Irrigation District - Northwest Service Area Project

### **Project Budget**

PID believes that this Project is foundational to Drought Planning and Water Supply Operations. Therefore, PID has planned to solely cover the non-Federal cost share of this Project. There are no other sources of Project funding.

The applicant will be contributing the funding necessary to meet cost share requirements at a minimum of 50 percent total Project cost. The source of funds are mainly water sales revenue and land assessments. The funds are available in PID accounts, and no time constraints or contingencies exist on the funds. There is no other grant funding and no third-party in-kind costs associated with this Project.

### **Budget Proposal**

The total Project cost is the sum of all allowable items of costs, including all required cost sharing, that are necessary to complete the Project. Table 3 Provides the Total Project Cost and Table -4 provides a Summary of Non-Federal and Federal Funding Sources. Table-5 Budget Proposal shows a breakdown of the costs by budget category. Indirect costs are not included in this grant budget. All necessary supplies, materials, and equipment will be supplied by the contractor in the construction phase and are included in the Implementation cost. A detailed Engineer's Opinion of Probable Construction Cost (EOPCC) is presented in **Appendix H** 

### Table 3 -Total Project Cost Table

| SOURCE                                                | AMOUNT         |
|-------------------------------------------------------|----------------|
| Costs to be reimbursed with requested Federal funding | \$500,000.00   |
| Costs to be paid by the applicant                     | \$506,762.30   |
| Value of third-party contributions                    | \$0            |
| TOTAL PROJECT COST                                    | \$1,006,762.30 |

### Table 4 -Summary of Non-Federal and Federal Funding Sources

| FUNDING SOURCES                      | AMOUNT       |  |
|--------------------------------------|--------------|--|
| Non-Federal Entities                 |              |  |
| Porterville Irrigation District      | \$506,762.30 |  |
| Non-Federal Subtotal                 | \$506,762.30 |  |
| <b>REQUESTED RECLAMATION FUNDING</b> | \$500,000.00 |  |

## **USBR WaterSMART Drought Response Program FY2023 R23AS00005** Porterville Irrigation District – Northwest Service Area Project

### Table 5 -Budget Proposal

| DUDGET ITEM DESCRIPTION                    | COMPUTATION |          | Quantity | TOTAL COST      |
|--------------------------------------------|-------------|----------|----------|-----------------|
| DODGET TIEM DESCRIPTION                    | \$/Unit     | Quantity | Туре     | IUIAL COSI      |
| Salaries and Wages                         |             |          |          |                 |
| Sean Geivet, District Manager              | \$40.89     | 80       | HRS      | \$ 3,271.20     |
| Jody Griswold-Bratcher, Secretary          | \$29.15     | 40       | HRS      | \$ 1,166.00     |
| Fringe Benefits                            |             |          |          |                 |
| Sean Geivet                                | \$17.78     | 80       | HRS      | \$ 1,422.40     |
| Jody Griswold-Bratcher                     | \$13.58     | 40       | HRS      | \$ 543.20       |
| Travel                                     |             |          |          |                 |
| None                                       |             |          |          |                 |
| Supplies and Materials                     |             |          |          |                 |
| None                                       |             |          |          |                 |
| Contractual/Construction                   |             |          |          |                 |
| Grant Application                          | \$20,000    | 1        | LS       | \$20,000.00     |
| Provost & Pritchard Consulting Group       |             |          |          |                 |
| Enviro. Documentation (CEQA)               | \$84,000    | 1        | LS       | \$84,000.00     |
| USBR NEPA Support & Coordination           | \$20,000    | 1        | LS       | \$20,000.00     |
| Project Facility Design                    | \$66,000    | 1        | LS       | \$66,000.00     |
| Right of Way Acquisition                   | \$8,500     | 1        | LS       | \$8,500.00      |
| Permitting                                 | \$20,000    | 1        | LS       | \$20,000.00     |
| Construction Support                       | \$70,000    | 1        | LS       | \$70,000.00     |
| Reporting                                  | \$10,000    | 1        | LS       | \$10,000.00     |
| Travel to and From Site <sup>1</sup>       | \$0.625     | 2,700    | Miles    | \$1,687.50      |
| Local Newspapers Notices                   | \$5,000     | 1        | LS       | \$5,000.00      |
| Project Construction                       |             |          |          |                 |
| Construction Contract                      | \$654,120   | 1        | LS       | \$654,120.00    |
| SWPPP/DCP Permit Fees                      | \$16,810    | 1        | LS       | \$16,810.00     |
| <b>Environmental and Regulatory Compli</b> | ance Cost   |          |          | 1               |
| None                                       |             |          |          |                 |
| Other                                      |             |          |          |                 |
| Right of Way/Easement Acquisition          | \$30,000    | 0.8      | Acre     | \$24,242.00     |
| TOTAL DIRECT COSTS                         |             |          |          |                 |
| Indirect Costs                             |             |          |          |                 |
| None                                       |             |          |          |                 |
| TOTAL ESTIMATED                            | PROJECT C   | OSTS     |          | \$ 1,006,762.30 |
|                                            |             |          |          |                 |

Porterville Irrigation District - Northwest Service Area Project

### **Budget Narrative**

### Salaries and Wages

PID will coordinate portions of the Project plan development and construction management. Salaries and wages were broken out to a unit rate per each category of District Personnel expected to be involved in the Project. Salaries for administrative staff are included for tasks related directly to development of the plans, such as typing specifications and photocopying bidding documents. These are considered direct costs.

PID will contract Provost & Pritchard Consulting Group as a Project consultant. The pipeline will be constructed by a licensed contractor. Estimated costs associated with these sub-contractors will be discussed in the Contractual/Construction section below.

The Program Manager will be Sean Geivet, District Manager for PID. The lead design engineer will be Matt Klinchuch, Senior Engineer with Provost & Pritchard.

### Fringe Benefits

The hourly rates for Fringe Benefits of PID employees is listed in **Table 5** Fringe Benefit costs include District contributions toward Social Security & Medicare, pension plan, life and AD&D insurance, long term disability, medical & vision insurance, dental insurance are calculated in accordance with established District policy and approved by the PID Board of Directors.

### Travel

Travel costs are included for the District's engineering consultant to attend meetings and monitor construction. It is assumed that travel costs will originate from Visalia, CA and go to the District office's for plan development meetings, pre-construction & bidding meetings and to the Project site for construction inspection and management services. The mileage rate of compensation will be per the rate current at the time of contracting. The preliminary estimate for plan development meetings includes 5 meetings requiring engineering consultant staff to travel to the District office and Project Area. A preliminary travel trip estimate based on the preliminary schedule (Appendix F) for construction management and various construction inspections assumes 40 trips to the site.

Travel costs are not included for PID staff since all work will be performed in their District.

### Equipment

There is no cost for equipment included in the Project costs. It is assumed that the construction contractor will have their own equipment and if they do not, they will acquire it with costs built into their Project bid proposal.

### Materials and Supplies

All material and supply costs associated with the Project are items included in contractual work to be performed by the construction contractor

### Contractual

The Project construction will all be accomplished by a licensed construction contractor. There is no contract in place at this time.

One contract will be with the District's engineering consultant, Provost & Pritchard. This contract will be for survey, design, right-of-way documentation, permitting, construction inspection,

Porterville Irrigation District - Northwest Service Area Project

construction staking, and Project reporting. USBR reporting is included with Project reporting tasks. Also, a geotechnical investigation will be performed through a sub-consultant to the District's engineering consultant. There is no contract in place at this time for Project construction related consulting work. The costs included in the Project Budget are based on previous costs confirmed through similar jobs recently completed in the area.

After the design is complete the project will go out to public bid to be constructed by a licensed construction contractor. The construction contract will publicly advertised, bid, and awarded to the lowest responsible, responsive bidder meeting all contract requirements.

### Third-Party In-Kind Contributions

There are no third-party contributions for this Project.

### Environmental and Regulatory Compliance Costs

A portion of the budget was set aside for environmental and regulatory compliance. Costs for USBR reporting were included in Contractual/Construction section since they will not be completed by PID.

Other environmental costs are likely to include work pertaining to habitat monitoring and construction inspection, however surveys and permits have not been completed at this time. Provost & Pritchard will likely be contracted to complete the SWPPP and DCP. The compliance costs associated with those permit requirements are estimates (see Budget Summary Table in Section 3.1 in (Appendix H.

### **Other Expenses**

Right of Way and Easement Acquisition: Approximately 1,760 linear feet of 20 foot right of way is estimated being required for the pipeline easement for the Project. The right of way is estimated to cost \$30,000 per acre. The total estimated Project right of way is 1 acre and costs are estimated at \$24,242.

### Indirect Costs

Indirect costs will not be included in this grant funding request.

### Environmental and Cultural Resources 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.

The portion of Porter Slough where the proposed turnout structure is located has been actively maintained by the District so that it can be operated appropriately. This maintenance has resulted in previous ground disturbance and heavy equipment use in the area. Similar equipment will be utilized while constructing the check structure retrofit and equipment house. Typical mitigation measures, such as those listed below, will be used to minimize impacts on the surrounding area, along with other suggested practices developed in the CEQA/NEPA process. Project construction will be temporary, short (anticipated 2 months), and cover a small area. The construction of facilities are not anticipated to adversely impact the environment.

- Dust: Use of water trucks
- Air Quality: Use of water trucks and other suggested practices developed through a Dust Control Plan with the local Air Quality Control Board
- Water Quality: Construction when the channel is dry and obtaining Storm Water Pollution Prevention Plan permit with local Water Quality Control Board
- Habitat: Work to be performed during working hours; buffer zones (if needed)

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

It is not anticipated that the Project would affect any endangered or threatened species. A biological report will be performed as part of the CEQA/NEPA process, the Project area has the potential habitat for some species (Blunt-nosed Leopard Lizard and San Joaquin Kit Fox) (Appendix I). However, mitigation measures such as pre-construction surveys and buffers (if needed) intend to be utilized during construction to ensure no negative impacts to species or habitat.

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

Not aware of any wetlands or other CWA jurisdictional surface waters. The Porter Slough is connected to a Water of the US. This will likely trigger additional permitting requirements such as 404 permit through the Army Corps of Engineers, 401 permit through the California State Water Resources Control Board, and 1602 permit through the California Department of Fish & Wildlife.

### When was the water delivery system constructed?

It is unknown when the District's facilities were created, although they were most likely formally maintained after the District formed in the 1949. Porter Slough is originally a natural channel that flowed through the area.

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

Yes. The earthen canal banks and drive roads are routinely maintained for annual irrigation deliveries. The Project will modify the canal bank and drive road during the construction of a turnout structure in the South canal bank and erosion control measures (i.e. concrete canal lining and rock rip rap) to protect the canal.

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

Unknown. A CHRIS record search has not been performed.

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

No. Archeological sites are unlikely given the Project area includes existing irrigation facilities.

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

No. On the contrary, the Project will enhance groundwater conditions provide benefits to growers and residents within the District in rural parts of Tulare County which are generally considered a low-income area with a high minority population.

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

No. None are known to exist at site. The District has not received any AB52 letters regarding tribal consultation.

### 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. Routine operation and maintenance of the existing canal would not be affected.

### Required Permits or Approvals

Required permits and approvals include the following:

### National Environmental Policy Act (NEPA)

PID, in cooperation with USBR, will comply with the National Environmental Policy Act (NEPA) prior to approval to construct the Project. NEPA Compliance documents will be prepared either by District consultants or by Bureau staff. Either group would develop the documentation in coordination with District staff. It is anticipated that an Environmental Assessment will be prepared and determine that a Finding of No Significant Impact will be required.

#### California Environmental Quality Act (CEQA)

The District, as a local Lead Agency, is required to comply with the California Environmental Quality Act (CEQA) prior to granting its approval to construct the project CEQA and NEPA requirements, while similar, have several distinct differences but can still be covered by a single "joint" document. The District's engineering consultant has experience preparing combined NEPA/CEQA documents for numerous similar projects. Therefore, NEPA and CEQA Compliance documents can be prepared by District consultants coordinating with District staff. It is anticipated that an Initial Study/Mitigated Negative Declaration will be prepared to comply with CEQA requirements.

#### Endangered Species Act

The CNDDB was reviewed for listed sightings in a 9-quadrangle area around the Project vicinity. **Appendix I** is a list of the recorded sightings of sensitive species in the 9-quadrangle area. Prior to completing the design, a qualified biological consultant will perform a Biological Reconnaissance Survey to check for signs of endangered species and verify the information in **Appendix I**. If necessary, mitigation or avoidance measures will be employed to reduce risk to protected species.

#### Other Environmental Statutes

### San Joaquin Valley Air Pollution Control District

A DCP will be prepared for the Project in compliance with the local Air Quality Control Board. The dust generated during construction will be temporary and no more than normal for local agricultural cultivation activities. PID will also employ all applicable requirements of the local Fugitive Dust Regulation. Typical mitigation measures, such as a water truck, will be used to minimize impacts on the surrounding area.

#### State Water Resources Control Board/Regional Water Quality Control Board

A SWPPP will be submitted to the State Water Resources Control Board. No adverse impacts are expected to water quality and temporary measures will be taken during construction to prevent water contamination and erosion.

#### US Fish & Wildlife

A biological reconnaissance study of the Project will be prepared to affirm results from the CNDDB evaluation. The US Department of Fish and Wildlife will be consulted regarding presence of listed species or habitat in the Project site or area of effect. It is not anticipated that any protocol level surveys will be required.

### CA Dept of Fish & Wildlife

A biological reconnaissance study of the Project will be prepared to affirm results from the CNDDB evaluation. The California Department of Fish and Wildlife will be consulted regarding presence of listed species or habitat in the Project site or area of effect. It is not anticipated that any protocol level surveys will be required.

### Native American Heritage Council

The Native American Heritage Commission will be consulted in the NEPA process through the Indian Trusts Assets process.

### Existing Drought Contingency Plan

The Porterville Irrigation District does not have a drought management plan, but the following documents address drought and climate change in the region.

- 1. North Kings Groundwater Sustainability Plan (2020): Topics addressed include climate change <u>https://www.easterntulegsa.com/gsp/</u>
- 2. Tule Basin Integrated Regional Water Management Plan (2018): Topics addressed include climate change, project lists, and identification of goals and water management strategies.<u>https://www.kingsbasinauthority.org/governance/governing-documents/irwmp/</u>

### Letters of Support

The project benefits are described above, but the qualitative significance of the project benefits is best demonstrated by the numerous letters of support from stakeholders, which can be found in **Appendix J**. Several stakeholder groups provided letters including local water agencies, regional water management agencies. Letters were received from the following:

- Eastern Tule Groundwater Sustainability Agency
- Lower Tule River Irrigation District
- Pixley Irrigation District
- Tea Pot Dome Water District

There is no known opposition to the project. No letters of opposition have been received, and no opposition to the project was made during the adoption of the Resolution to prepare the grant application.

### Official Resolution

**Appendix K** includes a signed resolution authorizing the preparation of this application and funding for the District's cost share. The resolution was adopted and signed on May 10, 2022. The resolution was adopted by the PID Board of Directors, which is comprised of local landowners, so the resolution represents support for the project from local citizens and landowners.

### Other Requirements

### Overlap or Duplication of Efforts Statement

PID does not have any overlapping or duplicate funding proposals for this project.

### Conflict of Interest Disclosure

PID is not aware of any actual or potential conflicts of interest that would impact either the grant application or the project if it is funded by USBR. PID will notify USBR promptly if a conflict of interest arises.

### Uniform Audit Reporting Statement

PID was not required to file a Single Audit Report last year.

### Certification Regarding Lobbying

PID has not engaged in any lobbying, therefore form SF-LLL is not required. Appendix L Is a letter from PID stating that they do not use or engage in any lobbying activities.

### Unique Entity Identifier and System for Award Management

PID has previously received grants from USBR and is already registered with the System for Award Management and meets other requirements for award and implementation of a grant contract.

The District uses the following identifiers: Employer Identification Number: 94-60003993 Unique Entity Identifier: HAMAE3VLA2Z1



EASTERN TULE GROUNDWATER SUSTAINABILITY AGENCY JOINT POWERS AUTHORITY

Eric Borba Chairman

Steve Kisling Vice-Chairman

Rogelio Caudillo General Manager

Aubrey A. Mauritson Legal Counsel

City of Porterville

**County of Tulare** 

Kern-Tulare Water District

Porterville Irrigation District

Saucelito Irrigation District

Teapot Dome Water District

Terra Bella Irrigation District

Vandalia Water District

info@easterntulegsa.com 559-781-7660

881 W. Morton Ave Suite D Porterville, CA 93257 May 31, 2022

Porterville Irrigation District Attn: Sean Geivet, District Manager 22086 Avenue 160 Porterville, CA 93257-9261

### Re: Letter of Support for Porterville Irrigation District's Application for the USBR Water SMART Drought Response Program R23AS00005

To Whom It May Concern,

This letter is to offer support for Porterville Irrigation District (PID) application for the WaterSMART Drought Response Program. The Eastern Tule Groundwater Sustainability Agency (ETGSA) is working cooperatively with PID on the Northwest Service Area pipeline project because the ETGSA understands the critical need for a drought resiliency project such as this which will increase the reliability of groundwater for dry years and helps to decrease reliance on groundwater in the area.

The ETGSA recognizes the value of water infrastructure projects that can increase water management flexibility and water supply reliability in rural communities. This project aligns with the PID water management goals to achieve long-term sustainability and the ETGSA is therefore supportive of the Project and PID's application or program funding.

Sincerely,

Eni A.M.

Eric Borba Chairman



**SINCE 1950** 

Tom Barcellos President

Jim Costa Vice President

Frank Mendonsa Director

Joshua Pitigliano

Alex Garcia Director

Eric Limas General Manager

Beth Grote-Lewis Assessor

Alex Peltzer Legal Counsel May 25, 2022

Porterville Irrigation District Attn: Sean Geivet, District Manager 22086 Avenue 160 Porterville, CA 93257-9261

Re: Letter of Support for Porterville Irrigation District's Application for the USBR Water SMART Drought Response Program R23AS00005

To Whom It May Concern,

This letter is to offer support for Porterville Irrigation District (PID) application for the WaterSMART Drought Response Program. Lower Tule River Irrigation District (LTRID) is working cooperatively with PID on the Northwest Service Area pipeline project because LTRID understands the critical need for a drought resiliency project such as this which will increase the reliability of groundwater for dry years and helps to decrease reliance on groundwater in the area.

LTRID recognizes the value of water infrastructure projects that can increase water management flexibility and water supply reliability in rural communities. This project aligns with the PID water management goals to achieve long-term sustainability and LTRID is therefore supportive of the Project and PID's application or program funding.

Sincerely

Eric Limas General Manager

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

**SINCE 1958** 



Frank Junio President

Russell Schott Vice President

Bill De Groot Director

Randall Parreira Director

Neal Westbrook Director

Eric Limas General Manager

Beth Grote-Lewis Assessor

Alex Peltzer Legal Counsel May 25, 2022

Porterville Irrigation District Attn: Sean Geivet, District Manager 22086 Avenue 160 Porterville, CA 93257-9261

Re: Letter of Support for Porterville Irrigation District's Application for the USBR Water SMART Drought Response Program R23AS00005

To Whom It May Concern,

This letter is to offer support for Porterville Irrigation District (PID) application for the WaterSMART Drought Response Program. Pixley Irrigation District (PIXID) is working cooperatively with PID on the Northwest Service Area pipeline project because PIXID understands the critical need for a drought resiliency project such as this which will increase the reliability of groundwater for dry years and helps to decrease reliance on groundwater in the area.

PIXID recognizes the value of water infrastructure projects that can increase water management flexibility and water supply reliability in rural communities. This project aligns with the PID water management goals to achieve long-term sustainability and PIXID is therefore supportive of the Project and PID's application or program funding.

Sincerely. Eric Limas

General Manager

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

Since 1954



Teapot Dome

Matthew Leider President

Dyson Schneider Vice President

Tim Peltzer Director

David Sherwood Director

Ron Castro Director

Eric Limas General Manager

Alex Peltzer Legal Counsel May 25, 2022

Porterville Irrigation District Attn: Sean Geivet, District Manager 22086 Avenue 160 Porterville, CA 93257-9261

Re: Letter of Support for Porterville Irrigation District's Application for the USBR Water SMART Drought Response Program R23AS00005

To Whom It May Concern,

This letter is to offer support for Porterville Irrigation District (PID) application for the WaterSMART Drought Response Program. Tea Pot Dome Water District (TPDWD) is working cooperatively with PID on the Northwest Service Area pipeline project because TPDWD understands the critical need for a drought resiliency project such as this which will increase the reliability of groundwater for dry years and helps to decrease reliance on groundwater in the area.

TPDWD recognizes the value of water infrastructure projects that can increase water management flexibility and water supply reliability in rural communities. This project aligns with the PID water management goals to achieve long-term sustainability and TPDWD is therefore supportive of the Project and PID's application or program funding.

Sincerely

Eric Limas

General Manager

357 E. Olive Avenue Tipton, Ca 93272 Office: (559) 686-4716 Fax: (559) 686-0151 Email: ltrid@ltrid.org 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 Director

JOSEPH "BRETT" McCOWAN Director

> EDWIN L. CHAMBERS Director

Upon motion by Director Gisler, seconded by Director Chambers, the following Resolution was passed and adopted:

### **RESOLUTION NO. 2022-05-03**

### RESOLUTION AUTHORIZING APPLICATION TO THE UNITED STATES DEPARTMENT OF THE INTERIOR, BUREAU OF RECLAMATION FOR FISCAL YEAR 2023 DROUGHT RESILIENCY PROJECT FUNDING OPPORTUNITY ANNOUNCEMENT NO. R23AS00005

- *WHEREAS,* the Board of Directors of the Porterville Irrigation District have met this day in regular session; and
- *WHEREAS,* a grant funding opportunity has been presented by the United States Department of the Interior, Bureau of Reclamation (USBR). The USBR WaterSMART Drought Response Program supports a proactive approach to drought by providing financial assistance to water managers to develop and update comprehensive drought plans and implement projects that will build long-term resilience to drought; and
- *WHEREAS,* the Porterville Irrigation District (District), a public entity established under the laws of the State of California, hereby authorizes its agent(s) to provide to the USBR all Notice of Funding Opportunity (NOFO) R23AS00005 (Grant) application materials pertaining to such Drought Response Program and agreements required;

*NOW, THEREFORE, BE IR RESOLVED,* by the Board of Directors of Porterville Irrigation District as follows:

- 1. That the Secretary-Treasurer/Assessor/Collector, Jody Griswold-Bratcher, Official Resolutions and the District Manager, Sean Geivet, are hereby authorized to execute for and on behalf of the Porterville Irrigation District this application and to file with the USBR for the purpose of obtaining certain federal financial assistance under Drought Response Program; and
- 2. The District Board of Directors are in support of the Grant application and the General Manager, Sean Geivet, has reviewed the Grant application being submitted; and

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

### **RESOLUTION NO. 2022-05-03** Page 2

- 3. The District is capable of providing matching funds needed to fund the local cost share component in addition to the amount provided by the USBR, should the Grant be awarded to the District; and
- 4. If selected for the Grant, the District will work with the USBR to meet established deadlines for entering into a cooperative agreement.

**PASSED AND ADOPTED** this <u>10<sup>th</sup></u> day of <u>May</u> 2022 by the following vote:

| AYES:    | Borba, Chambers, Gisler, McCowan, Witzel |
|----------|------------------------------------------|
| NOES:    | None                                     |
| ABSTAIN: | None                                     |
| ABSENT:  | None                                     |

### **CERTIFICATE OF SECRETARY**

I do hereby certify that I am the Secretary of the Porterville Irrigation District, an irrigation district organized and existing under the laws of the State of California, and that the foregoing Resolution was duly adopted by the Board of Directors of said District at a Zoom meeting thereof duly and regularly held by the Porterville Irrigation District at Porterville, California on the 10<sup>th</sup> day of May 2022, at which meeting a quorum of said Board of Directors was at all times present and acting, and that said Resolution has not been rescinded or amended in whole or any part thereof, and remains in force and effect.

IN WITNESS WHEREOF, I have hereunto set my hand and the Seal of the Porterville Irrigation District this 10<sup>th</sup> day of May 2022.

Jody A Griswold-Bratcher, Secretary Porterville Irrigation District