

Well and Conveyance for Banking Return

WaterSMART Drought Response Program: Drought
Resiliency Projects for Fiscal Year 2024

Funding Opportunity No. R24AS00007

Applicant

Kern-Tulare Water District
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1. Technical Proposal

1.1 Executive Summary

Project Information	
Date	November 7, 2023
Project Name	Well and Conveyance for Banking Return
Applicant Information	
Name	Kern-Tulare Water District
City, County, State	Bakersfield, Kern County, California
Applicant Category	Category A – Water District
Funding Group	Funding Group II

Kern-Tulare Water District (Kern-Tulare, District) proposes to construct the *Well and Conveyance for Banking Return* (Project). Kern-Tulare is applying to Funding Group II as a Task B: *Increasing the Reliability of Water Supplies through Groundwater Recovery* project that will include drilling and equipping a new well and installation 6,030 LF of 42-inch pipeline and 2,620 LF of 30-inch pipeline to a new discharge point on the Friant Kern Canal (FKC) for return of banked recharge water to the District. KTWD has participated in banking programs with neighboring water districts within the Kern subbasin to bank surface supplies to recharge groundwater supplies in the region in wet years for extraction through wells for delivery of recharged supplies for beneficial use in dry years. The project will also tie-in an existing well to the existing well recovery network. This project will connect two 6 cfs capacity wells to provide a total extraction and return capacity of 12 cfs conveyed to the FKC for delivery to the District. The project will be constructed in the service area of a neighboring district to allow KTWD to return their recharged wet year surface supplies via the FKC. California has experienced more frequent and severe drought periods as a result of variable hydrology impacted by climate change. Although the current year shows non-drought conditions as a result of recent storms, the project area is expected to experience more frequent periods of severe wet years and severe dry years. Prior to this year, California experienced a severe three-year drought period that was only ended by a severe and unprecedented wet year. The project will improve drought resiliency by increasing available extraction and return capacity to meet the District’s existing irrigation needs in drought periods. Overall, implementation of the project will provide better management of 4,032 acre feet per year (AFY) in dry years.

The existing well, proposed well, and manifold pipeline is not on a federal facility, but the wells are proposed to discharge into the FKC, which is a Reclamation facility. The District will consult the Reclamation to complete the required NEPA and an encroachment permit before starting any construction activity. It is assumed that the grant will be awarded by October 31, 2024. Construction of the project is expected to start in December 2025 and the Project is expected to be complete within the 3 years allotted for Funding Group II.

1.2 Background

The following sections provide relevant background information of the District's service area and details on the District's available water supply and water use.

1.2.1 District Service Area

The District is located in both the Tule and Kern Subbasins of the Tulare Lake Groundwater Basin. The District was formed on March 5, 1974 to provide agricultural water within its service area. The District is comprised of 19,600 acres located on the eastern side of the San Joaquin Valley in the Counties of Kern and Tulare in California, approximately 8 miles east of Delano and 27 miles north of Bakersfield. Existing land use within the District is predominately irrigated agriculture with approximately 18,100 irrigated acres. The District serves 54 Water Users through 96 turnouts.

1.2.2 Major Crop Area

Historically, the primary crops in the District include blueberries, Sudan grass, alfalfa, citrus, trees & nuts, and wine and table grapes. In recent years there has been a conversion of citrus and grapes to trees and nuts such as pistachios, almonds, cherries, persimmons, and pomegranates.

1.2.3 Primary Water Supplies and Sources

The primary water sources within the District's service area are a combination of imported surface water and groundwater. According to the KTWD Management Area Plan developed under California's Sustainable Groundwater Management Act (SGMA), the primary source of water for the District is Central Valley Project (CVP) water.

The District has two Cross Valley Contracts (14-06-200-8601A and 14-06-200-8367A) with Reclamation, which began delivery in 1977, for a combined total of up to 53,300 AFY of CVP water. In 2012, Kern-Tulare purchased a Friant Class 2 Contract (IIR-1460A) for up to 5,000 AFY of CVP water. This water is only available to the District after Class 1 Friant Contractor supplies have been satisfied. The District also participates in purchases of additional Class 1 and Class 2 water supplies from other Friant Contractors, purchases of CVP water from other South of Delta (SOD) contractors, and purchases of Kern River Water from the City of Bakersfield. Friant Water is typically available for purchase in most years. On occasion, SOD purchases are either delivered directly to the District to meet the existing need or for banking in wet years. When available, the District, as a Class 2 contractor, also enters into contracts for Section 215 water (or Friant Uncontrolled Season supplies) from Reclamation. The District has also purchased Friant uncontrolled season water from other Friant Contractors as needed.

Additionally, the District executed a 20-year contract with Hathaway, LLC in 2016 to receive produced water. The District currently receives about 2,400 AFY of water from this source on the east side of the District, which is delivered to the District's Big 4 reservoir to be blended with other

water sources before being distributed. The source of oilfield produced water is from exempted aquifers beneath and hydrologically separated from the fresh water bearing zones of the basin.

Since 2001, the District has developed long-term groundwater banking programs with North Kern Water Storage District (North Kern), Rosedale-Rio Bravo Water Storage District (Rosedale-Rio Bravo), and West Kern Water Storage District (West Kern) to deliver excess, wet-year water when surface supplies are available and to extract groundwater during years of inadequate supplies. The North Kern project yields an annual dry year supply of up to 5,000 acre-feet. The agreement requires the District to bank water before it can be extracted and leave 10 percent of the water banked in North Kern to account for losses. The Rosedale-Rio Bravo project yields an estimated dry year annual supply of up to 9,000 acre-feet. The agreement requires the District to bank 2.13 acre-feet for each acre-foot extracted and to bank water before it can be extracted. The West Kern project yields an estimated dry year annual supply of up to 2,000 acre-feet. The agreement requires the District to bank 2 acre-feet for each acre-foot extracted and bank water before it can be extracted. Supplies available to the District for banking include the District’s CVP contract supplies, Section 215 water, flood flows conveyed in the Friant-Kern Canal, purchases from other CVP Contractors, Kern River water, and SWP water.

The following table provides a summary of the available surface and recovered groundwater supplies in the latest 10-year period from 2013-2022 and in 2017, an unconstrained wet year. The 10-year average supply to the district is approximately 34,066 AFY.

Table 1. Available Water Supplies

Water Supply Source	10 Year Average (2013-2022) (AF)	Unconstrained Wet Year (2017) (AF)
KTWD Cross Valley Contract (XVC)	4,390	0
KTWD Friant Class 2	973	4,309
Purchases from Friant Contractors	3,954	18,347
Friant Uncontrolled Season (Section 215)	1,307	6,303
South of the Delta (SOD) Purchases	4,555	22,758
Kern River Purchases	6,026	30,736
Produced Water	1,597	2,098
Recovered Supplies from Banking	11,264	0
Total	34,066	84,551

Water Delivery System

The District’s distribution system consists of 4 pumping plants from the FKC, 6 re-lift pumping plants, 60 miles of buried pipelines, and 3 regulatory reservoirs. All turnouts and District pumping plants are metered.

1.2.4 Water Use

As previously discussed, water use within the District primarily serves as irrigation water for agricultural use. According to the Kern-Tulare Management Area Plan, average deliveries for irrigation from 1993 to 2017 were approximately 36,700 AFY. This demand is met by available surface water supplies, recovered groundwater recharge supplies, and supplemented by additional groundwater pumping at privately-owned landowner wells.

1.3 Project Location

The Project is located in Kern County, California approximately 1.7 miles southwest of Cawelo Water District. The project location includes the new well at [35°27'48.08"N, 119°11'19.73"W], the existing well to be connected at [35°28'13.86"N, 119°11'21.90"W], and the pipeline alignment starting at the new well location and ending at [35°29'13.24"N, 119°11'17.33"W] on the FKC discharge point. Figure 1 provides the location of the project site.

1.4 Project Description

The project includes drilling, installing, and equipping a new well, connection of an existing well, and installation of pipeline conveyance to the FKC consisting of 6,030 LF of 42-inch C900 PVC pipe and 2,620 LF of 30-inch C900 PVC pipe. The 30-inch pipeline starts at the connection to the new well (99-06-013) and continues north on Zachary Avenue for connection to the existing well (99-06-008). After the road crossing on Burbank Street, the 30-inch pipeline connects to the 42-inch pipeline and continues to run north crossing the Calloway Canal approximately 0.5 miles from Burbank Street. The alignment will connect a new discharge point on the FKC. Connection for the new well and the existing well consist of 12-inch steel pipeline lateral connection to the mainline pipeline.





The goal of the project is to build the recovery well network within the region to allow for previously recharged surface water to be delivered to the District as part of KTWD's groundwater banking program. By partnering with the neighboring district to store excess surface water in existing recharge facilities in wet years, it replenishes the underground aquifer resulting in an increase in groundwater levels. This allows the District to add to their drought resiliency by adding capacity to return previously recharged supplies to supplement inadequate surface supplies to meet the demand in drought periods.

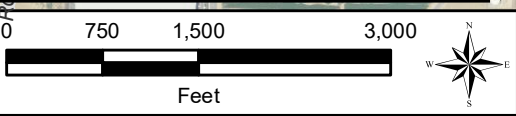
1.5 Performance Measures

The existing well has a flow meter and a flow meter will be installed on the new well to measure the volume and flow rate of groundwater pumped through the return pipeline for conveyance to the FKC and then to the District. The meter will be equipped with a totalizer at the output point of the well. The District will routinely check the device measurement accuracy and on an as needed basis. The District keeps a record of delivered returned banked supplies. In accordance with their



Project Location

-  Discharge Point
-  Proposed New Return Capacity Well
-  Existing District Well (Proposed tie-in to Return Capacity system)
-  Proposed Return Capacity Alignment



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Drought Resiliency Project Grant Application
Kern County, CA

Kern-Tulare Water District



WELL AND CONVEYANCE FOR BANKING RETURN
PROJECT LOCATION

NOVEMBER 2023

FIGURE 1

banking program, 10-percent of water banked will account for left behind losses prior to extraction of supplies. Performance measures to quantify the actual benefits will be the measured volume of delivered recovered water supplies.

1.6 Evaluation Criteria

1.6.1 Evaluation Criterion A – Project Benefits

Sub-Criterion A1.b. Water Better Managed

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

The project will build long-term resilience to drought by using recovered supplies to supplement water supplies needed in dry years. The District’s banking program with neighboring water district allows for excess supplies to be banked for recharge in wet years, which Kern-Tulare relies on groundwater pumping to supplement surface supplies needed to meet demand in non-wet years, especially in drought periods. Focusing on this recovery of banked water supplies supports the regional goal for conjunctive use of surface and groundwater supplies to both meet the existing demand and maintaining groundwater levels through groundwater recharge. The benefit will provide an annual volume of 4,032 AFY for District use, however a higher-than-average amount of return would happen in the non-wet years since no well return would occur during times of recharge. The project is expected to continue to provide benefits for the life of the project of approximately 30 years.

How will the project improve the management of water supplies? For example, will the project increase efficiency, increase operational flexibility, or facilitate water marketing? If so, how will the project increase efficiency or operational flexibility?

The project will improve the management of water supplies by implementing the recovery of previously banked supplies for beneficial use in dry periods. Drilling and connecting the new and existing well will increase conveyance capacity by 12 cfs, thus improving operational flexibility for delivery of supplies to the District. Through the district’s existing groundwater banking program, recharged supplies are stored in the underlying aquifer for later recovery. The previously banked supply can be pumped and returned for delivery to the District when surface supplies cannot meet existing demand. The additional conveyance capacity provides a mechanism to deliver pumped supplies to the District using the FKC. The volume of recovered supplies will be recorded to measure the amount of groundwater delivered.

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, state this and provide the average benefit over ten years or longer including dry years).

Each well will provide an average return capacity of 6 cfs. The total conveyance capacity of the project for the two wells is estimated as 12 cfs = [6cfs + 6cfs] or 24 acre-feet per day (AFD). It is assumed that water will be delivered for 8 months in non-wet years returning previously stored recharge water in wet years. Well extraction and return operations occur for conveyance of recovered supplies 7 out of 10 years. The annual water better managed is calculated as 4,032 AFY = [24 AFD * 30 days/month * 8 months/year * 7 years / 10 years]. The total 10-year total is 40,320 AF = [4,032 AFY * 10 years]. Regarding sizing extraction and return capacity based on the annual return, the wells will produce 5,760 AF of return in an 8-month period of operation, 7 of the 10 years to meet this total return of 40,320 AF over the 10-year period.

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

The total supplies were previously estimated in Section 1.2.3. The available water supplies include Cross Valley Contract supplies from Reclamation, Friant Class 2 supplies, Friant uncontrolled Section 215 water, produced water, recovered banking supplies, and water supply purchases including Friant Class 1 and Class 2, south of the delta supplies, and Kern River supplies. The average 10-year water supply for the period 2013-2022 is 34,066 AFY. Of this total supply the estimated benefit of 4,032 AFY is 12 percent of total supplies [4,032 AFY / 34,066 AFY = 12%].

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

The project will improve available conveyance to the District and deliver excess supplies to recharge facilities for recovery in drought years. This is significant to both maintain existing groundwater levels in the region as well as increase groundwater resources required to supplement available surface water supplies. By reducing the chronic lowering of groundwater levels, it promotes groundwater sustainability in the region. This is critical for management of supplies during drought periods because excessive pumping may impact users reliant on groundwater supplies as their sole water supply source. Management of supplies through conjunctive use of surface and groundwater supplies increase water supply reliability and flexibility to meet irrigation demand. Better management of groundwater levels also provides drought resiliency in dry years when surface supply allocations are likely to be reduced.

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

The project will provide greater supply recovered for use in drought years to the benefit of local landowners. Recorded volumes of recovered water will be provided to water managers to indicate the available supplies pumped from the project to better manage use of available water resources. This supply will serve as a supplemental supply to meet the needs of the District. This information is beneficial to track the volume of better managed supplies available for irrigation use. Through conjunctive use of the recovered groundwater banked supplies and available surface supplies, water managers can plan irrigation scheduling accordingly.

Wells

What is the estimated capacity of the new well(s), and how was the estimate calculated? How much water do you plan to extract through the well(s), and how does this fit within and comply state or local laws, ordinances, or other groundwater governance structures applicable to the area?

The average flow of existing wells near the project area is 6 cfs. As such, it is expected that the new and existing well will perform similarly to provide an average flow of 6 cfs each. The total extraction and return capacity of the project is estimated as 12 cfs = [6cfs + 6cfs]. The District will analyze flow measurement data over time after completion of the project to confirm the accuracy of the estimated well capacity. The volume of water extracted from each well is expected to be the recovery of previously recharged surface supply. The estimated benefit of the project is to utilize the 24 AFD capacity during 8 months of the growing season to return (24 x 8 x 30 = 5,760 AF) previously recharged water in 7 of 10 years. This is the return component of a groundwater bank that allows a supplemental supply to augment inadequate surface supplies in non-wet, drought or dry years. The Project is identified in the District's Management Area Plan developed under SGMA as a management action towards achieving groundwater sustainability by the year 2040.

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

Yes, Kern-Tulare has developed long-term groundwater banking programs with neighboring water districts to deliver excess water when surface supplies are available and to extract previously recharged water during years of inadequate supplies. Supplies are delivered to existing recharge facilities to actively recharge excess water to sustain groundwater levels in the region. The existing banking program was developed with other members and stakeholders participating in the Poso Creek Integrated Regional Water Management (IRWM) Group, for which Kern-Tulare is a member. These banking programs support conjunctive use of groundwater and surface supplies. Through banking of available surface supplies in wet years it allows for groundwater recharge to

maintain groundwater levels. This supports groundwater sustainability by increasing groundwater levels in the region.

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

The proposed well and connection to the existing well will serve the purpose of the return component of a water banking agreement. The use of the two wells is to return previously recharged surface supplies that are in groundwater storage beneath North Kern Water Storage District. Since Kern-Tulare is obligated in their groundwater banking agreement to leave 1 acre-foot of every 2 acre-feet recharged in storage, the proposed wells are not expected to adversely impact the aquifer. The water banking agreement is an approved agreement between the two districts and is not intended to harm the aquifer, it is intended to have positive effects on the aquifer. Kern-Tulare will work with Reclamation to complete the required environmental analysis under NEPA.

Table 2 provides details on the casing size, depth, screen intervals, and average flow of wells in the vicinity of the project area.

Table 2. Details of Nearby Wells

Well No.	Casing Size (Inches)	Depth (ft)	Blank Casing (ft)	Perforation (ft)	Average Flow (cfs)
99-04-005	18	1,003	400	603	7
99-00-035	16	880	400	480	6
99-00-032	16.25	704	300	404	6
99-00-026	16.25	704	300	404	6

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

The Kern-Tulare Groundwater Sustainability Plan (GSP) includes monitoring, reporting, and evaluation protocols to ensure the sustainable management of the District's multiple aquifers. These protocols involve frequent assessment of groundwater levels, water quality data, and subsidence data, with monitoring reports prepared every 5 years. The District's monitoring networks are implemented to accomplish the objectives specified in the Emergency Regulations

of the GSP and to ensure the District is capable of collecting data related to the sustainability indicators. Any undesirable results related to the sustainability indicators will trigger mitigation actions.

Mitigation actions outlined in the GSP are designed to respond to or avoid any significant adverse impacts by addressing the undesirable results and outlines specific criteria and thresholds to determine when these impacts become significant and unreasonable. To address an undesirable result, the GSP outlines mitigation actions that are triggered when certain thresholds are met. For example, if one representative monitoring well exceeds its minimum threshold (MT) for groundwater levels, the District will follow the procedures outlined by the KGA exceedance policy that includes measures to investigate and address the localized impacts that may be occurring.

Sub-Criterion A2.a. Climate Change

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

On occasion, Friant Kern Canal sees unmanaged floodwater flows, commonly referred to as Section 215 water, resulting from stormwater and CVP other water releases flowing downstream the canal. These releases of Section 215 water occur after Friant Class 1 and Class 2 supplies are satisfied. This water typically occurs for a short duration consisting of an exceptionally large volume of water. Diversion of these flows for recharge and later recovery in dry years reduce the risk of flooding to downstream water users. Completing the well and return conveyance components of a groundwater banking agreement ensures the banking parties continue to utilize the recharge facility that helps with flood management for the region.

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

Constructing extraction wells can significantly enhance community climate resilience in multiple ways. These wells facilitate access to previously recharged surface supply that is stored in groundwater banking, serving as a reliable water source during periods of drought and water scarcity, thereby reducing the community's vulnerability to drought. Also, by connecting into groundwater reserves, extraction wells help diversify water sources, lessening the community's reliance on surface water, which is more susceptible to the impacts of climate change. Additionally, the availability of groundwater through extraction wells can stabilize water supply, providing a consistent source of water that is less affected by short-term climate fluctuations such as heavy rainfall or extreme dry events. This stability in water supply supports agricultural activities, ensuring consistent crop, thereby improving food security and water security. Overall, the implementation of sustainable groundwater management practices, including construction of extraction wells, encourages long-term water security planning, aiding the community's ability to adapt to and withstand the challenges posed by a changing climate.

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

Implementing conjunctive use projects in the region supports water supply reliability for all water users in the basin. The region's economy is predominately agriculturally based, which is impacted during each drought cycle. Increasing water reliability helps to stabilize the local economy.

Sub-Criterion A2.b. 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?

As the source of CVP water supply diverted through the FKC, the San Joaquin River is a critical resource that supports endangered and threatened species including Delta Smelt, Longfin Smelt, and Chinook Salmon. Implementation of the project will increase operational flexibility of available water resources and reduce the reliance on the Delta. Kern-Tulare has implemented several groundwater banking programs to enhance the operational flexibility for delivery of water conveyed south of the Delta and received from the FKC. The project adds return capacity to allow previously stored wet year supply to be available during drought which benefits other users including environmental.

Sub-Criterion A2.c. Other Benefits

Will the project assist States and water users in complying with interstate compacts? Will the project benefit multiple sectors and/or users? Describe the associated sector benefits. Will the project benefit a larger initiative to address sustainability? Will the project help to prevent a water-related crisis or conflict? Is there frequently tension or litigation over water in the basin?

With Kern-Tulare adding return capacity from North Kern's recharge facility, it is providing the mechanism to better manage wet year surface water in the basin. Kern-Tulare's service area does not have the best suitable ground water storage characteristics, thus, storing wet year water in a neighboring district is advantageous and critical for their district's drought resiliency. This proposed project will help meet a larger regional initiative to add return capacity to the existing North Kern recharge facility. The return capacity is needed during dry or drought years when surface water is scarce, and it is critical to maintain groundwater levels for all users. Water is returned by this project improvement to areas where there is little to no recharge capacity or areas where users cannot store water easily in their district area. By utilizing the good conjunctive use facilities in North Kern, it helps alleviate tension or any potential litigation over groundwater dependent areas and drought impacts can be mitigated.

1.6.2 Evaluation Criterion B –Planning and Preparedness

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

The Poso Creek IRWM Region Drought Contingency Plan (DCP) serves as the Drought Plan for KTWD as the District is a member of the IRWM Group. The DCP describes the following drought focused elements: (1) a drought monitoring system consisting of short-term drought indicators and long-term drought forecasting of the four identified stages of drought, (2) a vulnerability assessment that considers drought vulnerabilities to existing critical water resources and the impacts of climate change on available water supplies, (3) mitigation actions identifying projects and programs developed to mitigate vulnerabilities to drought conditions, (4) response actions implemented in response to the four drought stages and better management of wet year supplies, and (5) an operational and administrative framework used for development of the drought plan.

The DCP identifies various drought plan objectives in support of building long-term drought resiliency. These objectives are achieved through proactive management of supplies prior to drought conditions including recharge and banking of excess surface supplies in wet years. The plan considers developed mitigation and response actions consistent with sustainable groundwater management goals and regional, urban, and agricultural water management.

Initial monitoring of existing water resources is used as the primary indicator of drought conditions. The defined drought stages range from management in surplus conditions to critical drought conditions. The first stage, the Surplus condition, is the most critical to capture and store available water supplies through recharge and groundwater banking. The second stage, Severe Drought, will engage coordination for management of recovered recharged water supplies. The third stage, Extreme Drought, increases management for recovery of recharged supplies and considers management of groundwater pumping to maintain sustainable groundwater levels. The highest stage of drought, Exceptional Drought, includes the same management practices with potential curtailments of groundwater supplies to prevent over drafting.

Describe how the drought plan includes consideration of climate change impacts to water resources or drought.

The Poso Creek DCP considers variable reductions to critical water supplies due to variable hydrology that results from climate change. As mentioned in the DCP, climate change is a long-term variable impacted by multiple parameters including temperature, precipitation, wind, and frequency of severe weather conditions such as extreme wet and extreme dry years. Climate change projections are difficult to predict but are typically impacted by the timing, volume, and quantity of precipitation in the watershed. The climate assessment in the DCP is based on previous planning documentation considering evaluation of the groundwater monitoring network to access

groundwater conditions and management of available water resources to mitigate drought conditions resulting from climate change.

Evaluation of Climate Change projections found that the long-term reliability of CVP supplies is expected to reduce in volume by 60 percent. Lower allocations can result in future drought vulnerabilities. These projections considered varying greenhouse gas emissions and possible salinity intrusions on the Delta water supplies resulting from sea level rises. It is anticipated that water supply reliability will decrease in the Poso Creek region. Recent historical conditions indicate that climate will become warmer and drier.

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

The Work plan used as guidance for developing the DCP was completed and approved in 2020. The DCP was developed with federal funding received from Reclamation under the WaterSMART Drought Response Program in 2021. The DCP was submitted to Reclamation in January 2022. Reclamation completed review of the DCP and provided back comments in June 2022. The revised DCP was submitted in October 2022 and approved by Reclamation in November 2022 to be in accordance with the Drought Response Program requirement. The plan will be updated every 5 years or on an as needed basis when significant changes to the plan are required.

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

The Plan was developed through a collaborative stakeholder process with the Poso Creek IRWM Group and incorporates elements of complementary planning efforts. The Poso Creek Group consists of seven member agencies including Kern-Tulare that are comprised of various agricultural water districts. The plan was prepared by an engineering consultant in coordination with the District. The DCP builds on each of these planning efforts to incorporate measures centered around managing wet year water supplies to better prepare for and manage during dry or drought periods. The response and mitigation actions incorporated stakeholder input and are outlined under the previous drought planning to optimize existing regional planning efforts. Involved stakeholders include agricultural and municipal agencies, local, state, and federal agencies, and local disadvantaged communities. Through the identified communication and outreach plan developed for implementation of the DCP, public workshops were held to engage a diverse group of stakeholders for public input and feedback on the components of the DCP.

Describe how your proposed drought resiliency project is supported by an existing drought plan. Does the drought plan identify the proposed project as a potential mitigation or response action? How is the proposed project prioritized in the drought plan? Does the proposed project implement a goal or need identified in the drought plan? Is the supported goal or need prioritized within the plan?

The Project supports the following objectives identified in the DCP: (1) Enhance conjunctive water-use, (2) Adapt to changes in the amount, intensity, timing, quality, and variability of runoff and recharge, (3) Implement region-wide water management actions, and (4) Increase reliability of water supplies. The proposed project is related to identified mitigation action in the DCP for implementation of out-of-District banking programs to return of recovered banked to the District. Projects involving out-of-District banked are ranked as a high priority for KTWD.

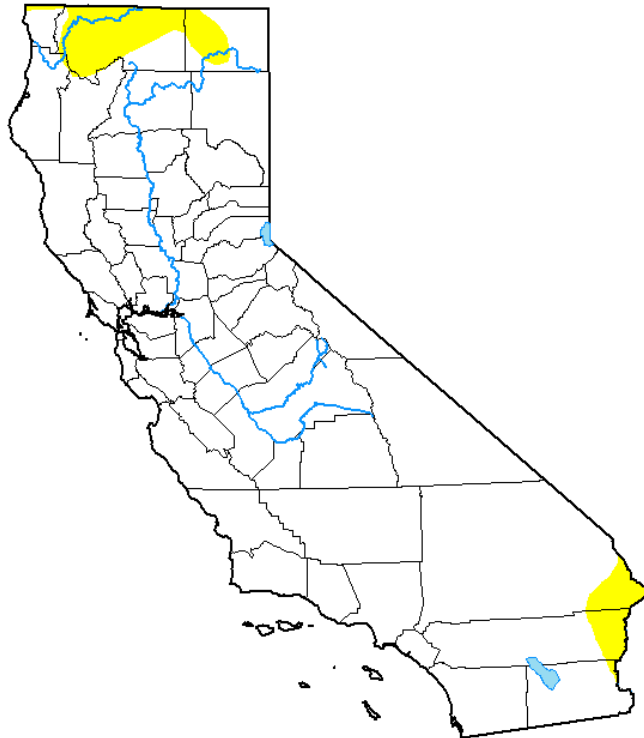
1.6.3 Evaluation Criterion C –Severity of Actual or Potential Drought or Water Scarcity Impacts to be addressed by the Project.

Describe recent, existing, or potential drought or water scarcity conditions in the project area. Is the project in an area that is currently suffering from drought, or which has recently suffered from drought or water scarcity? Please describe existing conditions, including when and the period of time that the area has experienced drought or water scarcity conditions. Include information to describe the frequency, duration, and severity of current or recent conditions. You may also provide information relating to historical conditions. Please provide supporting documentation. Describe any projected increases to the severity or duration of drought or water scarcity in the project area resulting from changes to water supply availability and climate change. Provide support for your response.

The most critical drought conditions occurred from 2014-2016 when drought was categorized as an “exceptional drought” intensity for the entirety of the two year period. More recently, critical drought conditions were also present for majority of the years 2021 and 2022. Current monitoring of drought conditions indicate there are no existing drought conditions in Kern County (Figure 2). However, it is anticipated that more frequent drought periods will occur in the future, so implementation of projects to better management supplies in drought periods are essential. Project implementation will allow the District to recover previously banked water supplies for use in dry years.

U.S. Drought Monitor California

October 31, 2023
(Released Thursday, Nov. 2, 2023)
Valid 8 a.m. EDT



Drought Conditions (Percent Area)

	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	94.34	5.66	0.00	0.00	0.00	0.00
Last Week 10-24-2023	94.32	5.68	0.00	0.00	0.00	0.00
3 Months Ago 08-01-2023	74.43	25.57	6.52	0.00	0.00	0.00
Start of Calendar Year 01-03-2023	0.00	100.00	97.93	71.14	27.10	0.00
Start of Water Year 09-26-2023	94.01	5.99	0.07	0.00	0.00	0.00
One Year Ago 11-01-2022	0.00	100.00	99.77	91.83	43.06	16.57

Intensity:

- None
- D0 Abnormally Dry
- D1 Moderate Drought
- D2 Severe Drought
- D3 Extreme Drought
- D4 Exceptional Drought

The Drought Monitor focuses on broad-scale conditions. Local conditions may vary. For more information on the Drought Monitor, go to <https://droughtmonitor.unl.edu/About.aspx>

Author:

Brian Fuchs
National Drought Mitigation Center



droughtmonitor.unl.edu

Figure 2. United States Drought Monitor in California

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

The Sustainable Groundwater Management Act (SGMA) mandates the assessment and mitigation of various adverse effects resulting from inadequate groundwater management. These impacts, if left unaddressed, may lead to chronic lowering of groundwater levels, reduction of groundwater storage, land subsidence that interferes with land uses, depletions of interconnected surface water, seawater intrusion, and degradation of water quality. Notably, the District's projected average groundwater pumping of 14,785 acre-feet annually is anticipated to exacerbate the decline in groundwater levels, highlighting the urgent need for sustainable management practices to prevent extensive depletion. If no action is taken, there could be increased reliance on existing banking programs, a need for expansion of existing programs, and decreased reliability of Delta exports,

all of which would significantly and unreasonably affect both the groundwater resources and the users within the District.

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

Without implementation of the project, groundwater levels may continue to decrease resulting in the dewatering of nearby wells and additional land subsidence. This directly impacts disadvantaged communities reliant on groundwater as their sole source of water supply. As restrictions on groundwater pumping may be in effect to maintain groundwater levels, local communities may be impacted by a lack of water supply availability. KTWD is one of the agricultural districts in this region working with the disadvantaged communities to expand recharge and recovery facilities to increase the reliability of groundwater for the communities within the Poso Creek IRWM Plan. The communities recognize the agricultural districts have access to the regional conveyance canals that provide the opportunities to convey the large volumes of surface water to recharge in wet years for later recovery and use in the dry years. This proposed project is to add the needed return capacity to ensure the stored surface supply can be recovered and available for use during drought.

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

Past drought conditions have had an impact on crop production and in the future may result in the fallowing of crop areas when demand cannot be met by existing supply. KTWD consists of mainly agricultural farmland so when supplies are reduced as a result of drought conditions it reduces the viability of the regional economy reliant on agriculture. The U.C. Merced's Economic Impact 2020 to 2022 drought on California Agriculture report indicates that the 2022 drought decreased the total gross revenue for agricultural crops by 4.6 percent resulting in a loss of \$1.72 billion¹.

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

The rising issue of water scarcity, and the growing competition for water resources creates tensions and disputes over water in the San Joaquin Valley. To counter this, boosting the water supply through various means, such as groundwater banking, requires the extraction and return of water component to be sized properly to meet the return needs of the water banking agreement. This

¹UC Merced. "Economic Impacts of 2020-22 Drought on California Agriculture." (2022). Prepared for the California Department of Agriculture.

project solves the need to enhancing wells return capacity to complete the water banking agreement between KTWD and NKWSD, it also helps to enhance groundwater sustainability and establish a more sustainable and dependable water source for agricultural and other water-reliant activities. This approach has the potential to alleviate the strain among diverse stakeholders, including farmers, local authorities, and environmentalists, by reducing the competition for water resources.

1.6.4 Evaluation Criterion D – Presidential and DOI Priorities

Describe how the proposed project will serve or benefit a disadvantaged or underserved community, identified using the tool described above.

According to the White House Council on Environmental Quality’s interactive Climate and Economic Justice Screening Tool, the area within Kern-Tulare’s District is classified as disadvantaged. The area within the District consists of unincorporated rural communities and is very reliant on agriculture for its economic activity. The rural area is also reliant on private domestic wells that are vulnerable to fluctuation in groundwater levels. Kern-Tulare’s proposed Project to add return capacity for delivery of previously banked wet year supplies is intended to offset pumping demand on the local aquifer, which helps stabilize groundwater levels for rural, domestic users.

Additionally, several other disadvantaged communities (DAC) including the Community of Richgrove, City of Delano, and the City of McFarland are nearest to the district. All the communities in this area rely solely on groundwater for drinking water. Projects that promote groundwater sustainability help to ensure a reliable and consistent drinking water supply for these communities. Projects like this one that help improve groundwater sustainability also contribute to the long-term economic development and resilience of the communities in the area. Many disadvantaged communities in the region rely on agriculture as a primary source of income and employment. The availability of sustainable groundwater sources supports agricultural activities, ensuring the viability of these communities' economic livelihoods.

1.6.5 Evaluation Criterion E – Readiness to Proceed and Project Implementation

Describe the implementation plan of the proposed project.

The Project implementation plan is illustrated through several tasks discussed below. The Project will be implemented under the direction of Kern-Tulare through a series of tasks performed by consultants, engineers, and contractors. The implementation plan is as follows.

Task 1 – Grant Administration and Reporting. A consultant will be engaged to perform grant administration and reporting including coordination with Reclamation, preparation of agreement amendments, and preparation of progress and financial grant reports. Reports will be submitted per the schedule laid out in the agreement, anticipated to be at a frequency of twice a year for the duration of the agreement. It is expected a final report will be due within three months of project completion. *Major milestones include submittal of interim reports and submittal of the final report.*

Task 2 – Design. Design will be approached as two components: well drilling and pipeline construction. A standard well design and specification package exist and will be utilized for the well drilling component of Project construction. An engineer will complete design and a specification package for the pipeline construction component. Design of the pipeline is anticipated to include surveying, geotechnical investigation, utility investigation; several iterations of design to complete a 100% design package; and preparation of bid specifications. Design of the connection to Reclamation’s Friant-Kern Canal (FKC) facility will be submitted to Reclamation for review and approval. *Major milestones include 100% design and Reclamation approval of the connection to the FKC.*

Task 3 – Construction Contracting. Construction Contracting will be approached as two components: well drilling and pipeline construction. The existing standard well design and specification package will be used in the bid package for the well drilling construction contract. As discussed in the Design task, a specification package for the pipeline component will be produced by the engineer for use in the bid package for the pipeline construction contract. Specifications will encompass requirements of the grant agreement. Both components will be advertised for competitive, sealed bids in accordance with applicable Code of Federal Regulations and public contracting codes. It is expected that the bid period will last for approximately one month, with an additional two weeks for bid review and award recommendation. The engineer will coordinate with bidders, prepare responses to requests for information, prepare as needed addenda, conduct pre-bid and bid opening meetings, and review and analyze bids. It is anticipated that the construction contracts will be awarded to the lowest responsive and responsible qualified bidder. The engineer will review received bids and make a recommendation to the District regarding award of construction contracts. *Major milestones include advertising construction contracts for bid, opening received bids, and awarding contracts to appropriate bidders.*

Task 4 – Environmental Documentation. Compliance with the California Environmental Quality Act (CEQA) is complete. An Initial Study/Mitigated Negative Declaration (IS/MND) was made available for public review and was adopted by the lead agency’s Board of Directors. A Notice of Determination was filed with the California State Clearinghouse and Kern County Clerk in October 2023. The completed CEQA will be used to support the NEPA process. The District and consultant will coordinate with Reclamation to produce the level of documentation required and on consultations with agencies as determined to be appropriate. The District understands that ground disturbing activities shall not start until a Notice to Proceed is issued by Reclamation grant

staff. As required, a qualified biologist will complete pre-construction surveys and conduct environmental and cultural worker awareness training; construction personnel will complete training prior to commencing ground-disturbing work, as needed. *Major milestones include commencement and completion of agency consultations, and receipt of the Notice to Proceed.*

Task 5 – Permits and Approvals. The engineer and contractor will coordinate to obtain the required permits. Anticipated permits are discussed further below.

Task 6 – Construction. As discussed above, construction contracts will be awarded via a competitive bid process to the lowest responsive and responsible bidder. Construction will include drilling and equipping one 6 cfs capacity well, furnishing and installing 2,620 LF of C900 DR 25 PVC 30-inch pipe, furnishing and installing 6,030 LF of 42-inch C900 DR 25 PVC mainline pipe, and connecting an existing 6 cfs capacity well to the main pipeline. The associated manifold piping will connect the well to the FKC where water will be discharged for return. Construction activities under the well drilling contract are anticipated to include mobilization; demobilization; drilling and equipping; pump test; and installation of a flow meter. Construction activities for under the pipeline contract are anticipated to include mobilization; demobilization; environmental compliance; potholing; open cut road pavement crossing and repair; valves; furnishing and installing pipelines; and the connection to the FKC. To the extent it is required under each contract, material will be procured in compliance with the Build America, Buy America Act. Labor will be obtained in compliance with applicable regulations such as the Davis-Bacon Act and prevailing wage, as required. *Major milestones include issuance of a Notice to Proceed to awarded contractors, mobilization, connection to the FKC discharge, and demobilization.*

Task 7 – Construction Management. This task will be performed by a consultant and includes construction observation; coordination and conducting of construction progress meetings; reviewing and responding to submittals; reviewing and responding to requests for information; preparing change orders as needed; reviewing invoices and recommending payments to the District; project closeout coordination; and general coordination with the contractor and District. *Major milestones include completion of a pre-construction kickoff meeting, regular progress check-in meetings, recommendation of retention payment release, and filing a Notice of Completion.*

The project schedule for implementation of the project is shown in Table 3 below. It is assumed for purposes of the schedule that the grant agreement will be signed on October 31, 2024.

Table 3. Project Schedule

Milestone/Task/Activity	Planned Start Date	Planned End Date
Grant Administration & Reporting	October 2024	October 2027
Design	October 2024	September 2025
Construction Contracting	October 2025	November 2025
Environmental Documentation	November 2024	November 2025
Permits and Approvals	September 2025	November 2025
Construction	December 2025	July 2027
Construction Management	December 2025	July 2027

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

Anticipated permits and approvals are discussed below.

CEQA and NEPA: It is anticipated that CEQA and NEPA documentation will be required for environmental compliance. CEQA is complete. If the Project is awarded funding, it is expected the NEPA process will commence in approximately November 2024 with a meeting with Reclamation’s grant, NEPA, biological, cultural, and tribal agency staff. The District’s consultant will work closely with Reclamation to prepare required documentation to support consultations with agencies as needed. It is expected the NEPA process will take approximately one year, resulting in a Notice to Proceed to the District, approving commencement of ground disturbing work. *Major milestones include commencement and completion of agency consultations, and receipt of the Notice to Proceed.*

Well Drilling: The well drilling contractor will obtain a well drilling permit. Prior to construction, the contractor will submit an *Overdrafted Basin Supplemental Well Application* and obtain a drilling permit from the Kern County Environmental Health Division. This process is expected to take approximately three months and will commence shortly after a construction contract is awarded; the permit will be obtained prior to construction. *Major milestones include submittal and approval of the Overdrafted Basin Supplemental Well Application.*

Encroachment Permit: As the pipeline component of construction involves connecting to Reclamation’s existing FKC discharge, it is anticipated that Reclamation’s approval of the connection design will be required. Anticipated permits/approvals include an encroachment permit. It is anticipated the process will include submitting relevant 100% design and an application form to Reclamation for review; the process is estimated to take approximately two months. *Major milestones include submittal of 100% design of the FKC connection to Reclamation, and approval of the connection.*

NPDES: A National Pollutant Discharge Elimination System (NPDES) permit is anticipated. The process is anticipated to include preparation and submittal of a Notice of Intent (NOI) and Stormwater Pollution Prevention Plan (SWPPP) to the California State Water Resources Control Board (State Board) by the prime contractor(s). The SWPPP will include Best Management Practices (BMP) to prevent waste and pollutants from contaminating surface water and groundwater. A Waste Discharge Identification (WDID) is expected to be issued following review of the application package. The permitting process is expected to commence shortly after construction contracts are awarded and is expected to take approximately three months. *Major milestones include submittal of the SWPPP to the State Board, and receipt of a WDID.*

Dust Control Plan: A Dust Control Plan and/or notification to the San Joaquin Valley Air Pollution Control District (Control District) is anticipated. The contractor(s) will complete the required application forms for submittal to the Control District. The permitting process is expected to commence shortly after construction contracts are awarded and is expected to take approximately three months. *Major milestones include submittal of the Dust Control Plan or notification to the Control District, and approval.*

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

Preliminary pipeline design was completed in support of the IS/MND and in support of the cost estimate for this application. The well location and pipeline alignment are determined. Additionally, as discussed above, an existing, standard well design is maintained and will be used for the Project.

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

No land purchases are required for Project implementation.

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

The District does not anticipate the need for any new policies to be put in place to implement the Project. If funding is awarded, the District understands a Board Resolution will be required; no other administrative actions are anticipated to be needed to implement the Project.

1.6.6 Evaluation Criterion F – Nexus to Reclamation

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? If the applicant is not a Reclamation contractor, does the applicant receive Reclamation water through a Reclamation contractor or by any other contractual means? Will the proposed work benefit a Reclamation project area or activity? Is the applicant a Tribe?

The Project includes direct connection to the FKC, which is operated and maintained by Reclamation. KTWD receives cross valley contract and CVP water from reclamation and also purchases CVP water supplies from other Friant contractors. The proposed project will involve consulting with Reclamation for connection of the manifold pipeline to the FKC discharge point.

1.6.7 Evaluation Criterion G – Stakeholder Support for Proposed Project

Describe the level of stakeholder support for the proposed project. Are letters of support from stakeholders provided? Are any stakeholders providing support for the project through cost-share contributions or through other types of contributions to the project?

The District works closely with neighboring districts to develop projects that benefit the region. Letters of support are provided by the Poso Creek IRWM Group consisting of seven other agricultural water districts as well as a letter of support from North Kern where the project location resides in. KTWD participates in an existing banking program with North Kern. The District is responsible for all cost share contributions of the proposed project. The project is expected to help alleviate and maintain groundwater levels in the region.

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

A letter of support is provided by the Poso Creek IRWM Group. The group comprises of a diverse group of stakeholders such as irrigation districts, a water conservation district, and several disadvantaged communities, all actively involved in the collaborative development of the DCP, where the proposed project is a recognized mitigation action. The Project promotes conjunctive use of water supplies which is an objective of the region. Additionally, this project is identified in the District's Management Area Plan, developed under SGMA, which involved an outreach program that included input from agricultural, industrial, and municipal users. These planning efforts illustrate the strong support for this Project and its goal of achieving groundwater sustainability and drought resiliency.

2. Project Budget

The mandatory Budget Narrative and Budget Detail are uploaded into Grants.gov with the submission of this application. A summary of Non-Federal and Federal Funding Sources is shown in Table 4.

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

Funding Sources	Funding Amount
Non-Federal Entities	
1. Kern-Tulare Water District	\$3,533,000
<i>Non-Federal Subtotal:</i>	\$3,533,000
Requested Reclamation Funding:	\$2,000,000

3. Environmental and Cultural Resources Compliance

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

The extent of construction activities (footprint) for the Project is relatively small and located within property owned and operated by North Kern and the Friant-Kern Canal (SF-299 permit will be obtained in this regard). The Project's area of potential effect is located within a canal easement or is on agriculturally disturbed soil. At this time, Kern-Tulare is not aware of any part of this project that will have a significant impact on soil, air, water, or animal habitat quality.

The Project requires limited earth-disturbing activities. Excavation and installation of the pipeline are not extensive movements of quantities of material. The Contractor will be required to prepare PM-10 Dust Control Prevention Plan (which will include construction BMPs such as the use of water or dust suppressants) and obtain a PM-10 dust control permit from the San Joaquin Valley Air Pollution Control District prior to any earth-disturbing activities. The proposed Project would also generate criteria pollutants from the use of diesel-powered vehicles and equipment, and earthmoving activities; however, it is assumed that the proposed project falls below the SJVAPCD Small Project Analysis Level (SPAL) threshold based on the anticipated construction duration and equipment.

Based on a preliminary review of CDFW's California Natural Diversity Database and USFWS' Information for Planning and Conservation, it is assumed habitat for special-status plant and wildlife species is not present in the project area. Nevertheless, Kern-Tulare will engage a qualified biologist to conduct both a reconnaissance-level survey during the planning phase and a pre-construction survey shortly before the start of construction to ensure that the construction area remains unoccupied by special-status plant and wildlife species. In addition, standard avoidance and minimization measures will be included in the Project specifications and will be followed during construction. Moreover, the duration of the construction activity is expected to be relatively short.

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?

Based on a preliminary review of aerial topography, CDFW's California Natural Diversity Database, and USFWS's Information for Planning and Conservation, it is assumed that Federally listed species are not present in the proposed project area. Moreover, based on the USFWS's Critical Habitat Mapper, the proposed project will not occur on designated critical habitat. A qualified biologist will conduct a reconnaissance-level survey during the planning phase to identify

potential impacts and provide avoidance and minimization measures, if any, to avoid or reduce those impacts.

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

There are no wetlands or other surface waters inside the Project boundaries that fall under CWA jurisdiction as “waters of the United States”.

When was the water delivery system constructed?

North Kern’s canal and pipeline distribution system and related works were originally completed in the 1950s, with additional features and enlargements (e.g., pumping stations, discharge pipelines, and reservoir systems) constructed with the expansion of the District’s service area (i.e., increased water demand). Kern County Land and Water Company, who subsequently lengthened its current 30-mile length, originally constructed the Calloway Canal between 1875 and 1877 by O.P. Calloway. Over time, the canal’s prism (i.e., trapezoidal shape), head gates, weirs, and other features have been replaced, repaired, or improved to allow for greater capacity and flow delivery to water users (Districts). As of late, modifications have been made to accommodate commercial, housing, and road development as the City of Bakersfield has slowly been expanding to the north. It is worth noting that the proposed Project will not result in any modifications or effects to individual irrigation system features (e.g., headgates, canals, or flumes).

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.

There will be no modifications to the existing irrigation distribution system. Construction at the FKC would likely occur during the typical maintenance period, which is November through January, to minimize impacting water deliveries.

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.

Combined North Kern and Kern-Tulare encompass approximately 79,600 acres and have not undertaken a District-wide inventory of properties listed or eligible for listing on the National Register of Historic Places. As part of the 106 process, however, Kern-Tulare will conduct a records search at the South San Joaquin Valley Information Center, archival research, Native American consultation, additional consultation with local historical societies, and archaeological

and built environment field surveys to determine whether there are any historic-era (i.e., 50 years old or older) built environment resources in the project area.

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

Based on previous, nearby project experience, it is expected that the records search at the South San Joaquin Valley Information Center and pedestrian-level survey will not result in the identification of known archaeological sites in the proposed project area. Moreover, due to intensive farming operations, it is unlikely that unknown archaeological resources will be discovered during construction of the proposed project.

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

Construction of the proposed project will support the important agricultural-based economy in the Southern San Joaquin Valley which will in turn support low income and minority people living in the region.

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

The proposed project will not limit access to or ceremonial use of Native American sacred sites or tribal lands.

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

The proposed project will not contribute to the introduction, continued existence, or spread of noxious weeds or non-native species in the region. The District and its Contractor will implement construction best management practices to ensure that the introduction or spread of noxious weeds or non-native species will not occur.



POSO CREEK IRWMP

Management Group

16294 Central Valley Hwy, Wasco, CA 93280
661-758-5153

Ms. Skye Grass
General Manager
Kern-Tulare Water District
5001 California Avenue
Bakersfield, CA 93309

Re: Letter of Support – Well and Conveyance for Banking Return

Dear Ms. Grass,

On behalf of the Poso Creek Integrated Regional Water Management (IRWM) Planning Group, I would like to express support of Kern-Tulare Water District's (KTWD) efforts to improve return capacity of banked water, which will help improve operational flexibility, efficiency, and drought preparedness in the region.

The Poso Creek IRWM Group is interested in and supportive of the *Well and Conveyance for Banking Return* project, as it will improve recovery and return capacity of their banking facilities to allow surface water recharged and stored in the groundwater basin to be available to the Poso Creek IRWM Group of districts.

This Project is an important improvement as it helps meet the need to enhance the Poso Creek Region's drought resiliency by connecting additional recovery wells to a network of recovery wells and return conveyance capacity. This Project will be of great benefit to both KTWD and other districts within the Poso Creek IRWM Region. I hope that our expression of support is helpful in your efforts to secure grant funding assistance to implement this project. If the funding agency would like to discuss our interest and support of your project, I would be happy to do so.

Sincerely,

Isela Medina
Treasurer, Poso Creek IRWM Group
imedina@semitropic.com
(661) 758-5113