DRAFT Initial Study/Mitigated Negative Declaration for Rainbow IX Water Bank

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Prepared By:



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Porterville Irrigation District 22086 Ave 160 Porterville, CA 93257

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Section 1

Initial Study/Negative Declaration Process

Porterville Irrigation District

22086 Avenue 160 Porterville, CA 93257

SECTION 1 CEQA Review Process

Project Title: Rainbow IX Water Bank Project

1.1 California Environmental Quality Act Guidelines

Section 15063 of the California Environmental Quality Act (CEQA) Guidelines requires that the Lead Agency prepare an Initial Study to determine whether a discretionary project will have a significant effect on the environment. All phases of the project planning, implementation, and operation must be considered in the Initial Study. The purposes of an Initial Study, as listed under Section 15063(c) of the CEQA Guidelines, include:

(1) Provide the lead agency with information to use as the basis for deciding whether to prepare an EIR or negative declaration;

(2) Enable an applicant or lead agency to modify a project, mitigating adverse impacts before an EIR is prepared, thereby enabling the project to qualify for a negative declaration;

(3) Assist the preparation of an EIR, if one is required, by:

(A) Focusing the EIR on the effects determined to be significant,

(B) Identifying the effects determined not to be significant,

(C) Explaining the reasons for determining that potentially significant effects would not be significant, and

(D) Identifying whether a program EIR, tiering, or another appropriate process can be used for analysis of the project's environmental effects.

(4) Facilitate environmental assessment early in the design of a project;

(5) Provide documentation of the factual basis for the finding in a negative declaration that a project will not have a significant effect on the environment

(6) Eliminate unnecessary EIRs;

(7) Determine whether a previously prepared EIR could be used with the project.

This document is the Initial Study for the proposed construction and operation of a water banking project located within Porterville Irrigation District. The project involves construction on approximately 50 acres and operation of existing water distribution and baking facilities within Tulare County, CA. Setton Pistachio of Terra Bella, Inc. ("Setton") is the owner and operator of the proposed project in accordance with district policies. Porterville Irrigation District (PID) will act as the Lead Agency for processing the Initial Study pursuant to the CEQA Guidelines.

1.3 Environmental Checklist

The Lead Agency may use the CEQA Environmental Checklist Form [CEQA Guidelines, Section 15063(d)(3) and (f)] in preparation of an Initial Study to provide information for determination if there are significant effects of the project on the environment. A copy of the completed Environmental Checklist is set forth in **Section Three**.

1.4 Notice of Intent to Adopt a Negative Declaration

The Lead Agency shall provide a Notice of Intent to Adopt a Negative Declaration (CEQA Guidelines, Section 15072) to the public, responsible agencies, trustee agencies and the County Clerk within which the project is located, sufficiently prior to adoption by the Lead Agency of the Negative Declaration to allow the public and agencies the review period. The public review period (CEQA Guidelines, Section 15105) shall not be less than 45 days when the Initial Study/Negative Declaration is submitted to the State Clearinghouse unless a shorter period, not less than 30 days, is approved by the State Clearinghouse.

Prior to approving the project, the Lead Agency shall consider the proposed Negative Declaration together with any comments received during the public review process, and shall adopt the proposed Negative Declaration only if it finds on the basis of the whole record before it, that there is no substantial evidence that the project will have a significant effect on the environment and that the Negative Declaration reflects the Lead Agency's independent judgment and analysis.

The written and oral comments received during the public review period will be considered by PID prior to adopting the Negative Declaration. Regardless of the type of CEQA document that must be prepared, the overall purpose of the CEQA process is to:

- 1. Assure that the environment and public health and safety are protected in the face of discretionary projects initiated by public agencies or private concerns;
- 2. Provide for full disclosure of the project's environmental effects to the public, the agency decisionmakers who will approve or deny the project, and the responsible trustee agencies charged with managing resources (e.g. wildlife, air quality) that may be affected by the project; and
- 3. Provide a forum for public participation in the decision-making process pertaining to potential environmental effects.

According to Section 15070, a public agency shall prepare or have prepared a proposed negative declaration for a project subject to CEQA when:

- (a) The initial study shows that there is no substantial evidence, in light of the whole record before the agency, that the project may have a significant effect on the environment, or
- (b) The initial study identifies potentially significant effects, but:
 - (1) Revisions in the project plans or proposals made by, or agreed to by the applicant before a proposed mitigated negative declaration and initial study are released for public review would avoid the effects or mitigate the effects to a point where clearly no significant effects would occur, and
 - (2) There is no substantial evidence, in light of the whole record before the agency, that the project as revised may have a significant effect on the environment.

The Environmental Checklist Discussion contained in Section Three of this document has determined that the environmental impacts of the project are less than significant with mitigation measures and that a Mitigated Negative Declaration is adequate for adoption by the Lead Agency.

1.5 Negative Declaration or Mitigated Negative Declaration

The Lead Agency shall prepare or have prepared a proposed Negative Declaration or Mitigated Negative Declaration (CEQA Guidelines Section 15070) for a project subject to CEQA when the Initial Study shows that there is no substantial evidence, in light of the whole record before the agency, that the project may have a significant effect on the environment.

The proposed Negative Declaration or Mitigated Negative Declaration circulated for public review shall include the following:

- (a) A brief description of the project, including a commonly used name for the project.
- (b) The location of the project, preferably shown on a map.
- (c) A proposed finding that the project will not have a significant effect on the environment.
- (d) An attached copy of the Initial Study documenting reasons to support the finding.
- (e) Mitigation measures, if any.

1.6 Intended Uses of Initial Study/Negative Declaration documents

The Initial Study/Negative Declaration document is an informational document that is intended to inform decision-makers, other responsible or interested agencies, and the general public of potential environmental effects of the proposed project. The environmental review process has been established to enable the public agencies to evaluate environmental consequences and to examine and implement methods of eliminating or reducing any adverse impacts. While CEQA requires that consideration be given

to avoiding environmental damage, the Lead Agency must balance any potential environmental effects against other public objectives, including economic and social goals.

PID, as Lead Agency, will make a determination, based on the environmental review for the Environmental Study, Initial Study and comments from the general public, if there are less than significant impacts from the proposed project and the requirements of CEQA can be met by adoption of a Mitigated Negative Declaration.

1.7 Notice of Determination (NOD)

The Lead Agency shall file a Notice of Determination within five working days after deciding to approve the project. The Notice of Determination (CEQA Guidelines, Section 15075) shall include the following:

- (1) An identification of the project including the project title as identified on the proposed negative declaration, its location, and the State Clearinghouse identification number for the proposed negative declaration if the notice of determination is filed with the State Clearinghouse.
- (2) A brief description of the project.
- (3) The agency's name and the date on which the agency approved the project.
- (4) The determination of the agency that the project will not have a significant effect on the environment.
- (5) A statement that a negative declaration or a mitigated negative declaration was adopted pursuant to the provisions of CEQA.
- (6) A statement indicating whether mitigation measures were made a condition of the approval of the project, and whether a mitigation monitoring plan/program was adopted.
- (7) The address where a copy of the negative declaration or mitigated negative declaration may be examined.
- (8) The identity of the person undertaking a project which is supported, in whole or in part, through contracts, grants, subsidies, loans, or other forms of assistance from one or more public agencies or the identity of the person receiving a lease, permit, license, certificate, or other entitlement for use from one or more public agencies.



Section 2

Project Description

22086 Avenue 160 Porterville, CA 93257

SECTION 2 Project Description

Project Title: Rainbow IX Water Bank

2.1 Project Description & Purpose

The purpose of the project is to bank water that is periodically available above current demands from the Friant Division of the Central Valley Project (Friant). The Project might also bank water from other systems, but separate approvals would be required. As required by the Banking Policy, 10% to 30% of the recharged water would be allocated to PID's storage account depending on the source. Recovered water would be delivered to lawful recipients within the allowed Places of Use, as designated in the Banking Policy Section 6 – Banking Leave Behind (Appendix E). The Project will not perform pump-in to the FKC. All text in the Water Banking Facility Report (Appendix E) highlighted in yellow is not part of the Project. If pump-in the FKC is pursued at a future date, new CEQA analysis will be required, including cumulative impact analysis. The Banking Policy defines Place of Use as provided in Table 2-1.

	Place of Use						
Constituents	Porterville ID	Eastern Tule GSA	Remainder of Tule Sub- Basin	Any Other Lawful Place			
Water Available to the District and Designated for Irrigation Delivery	20%	х	х	х			
Water Available to the District and Designated for Groundwater Recharge	10%	20%	х	х			
Water Available to the District and Designated for Out of District Sale	10%	20%	30%	х			
Non-District Water from the Tule River Tributary to the Basin	10%	20%	30%	х			
Other Non-District Water Supply	15%	15%	15%	15%			

Table 2-1: Banking Policy Place of Use. Referenced from Policy Principles for Porterville Irrigation District – Groundwater Banking Program (December 12, 2017)

Project objectives would be as follows:

- 1. <u>Increase water supply:</u> The Project would increase available supplies to PID, Setton and other participants.
- 2. <u>Improve groundwater conditions:</u> The Project would reduce aquifer overdraft in the PID, the East Tule GSA, the Tule Sub Basin and in other areas that receive recovered water.

- 3. <u>Reduce costs to produce groundwater:</u> The Project would cause groundwater levels to rise, thus reducing local groundwater pumping costs.
- 4. <u>Increase diversification and availability of water supplies:</u> The Project would increase the diversity of water supplies available to PID, its landowners, Setton and other participants.
- 5. **Facilitate compliance with the Sustainable Groundwater Management Act (SGMA):** The Project would significantly advance Setton, PID, and subbasin landowner's efforts to comply with SGMA, including all the then current policies and programs established by the ETGSA
- 6. <u>Subsidence reduction</u>: The Project would help to reduce ground subsidence by accruing more water in the local aquifer system and by reducing groundwater pumping within the local Places of Use.

Phase 1 is comprised of approximately 5 net acres and 4 net acres of existing and Phase 2 is comprised of an additional approximately 11 net acres and 25 net acres basins on immediately south of the Phase 1 basins. In total, the project would be consisting of approximately 61-acres of recharge basins and associated facilities, with 45-acres making up the net recharge area. The project facilities are summarized below (Table 2-2). See Figure 2-2 for proposed site layout.

Phase	APN	Acres			Recovery	Status		
Flidse		Gross	Net	Phase Net	Wells	Status		
1	302-060-035	7	5	- 9	2	Evicting		
	302-510-006	6	4			Existing		
2	302-060-035	15	11	36	26 1	26 1	1	Droposod
2	302-510-006	33	25		T	Proposed		
	Total	61	45	45	3			

Table 2-2: Summary of project facilities.

Project Conveyance and Distribution Facilities: The Project consists of one (1) existing turnout structure from the Tule River Intertie through the Lower Tule River Irrigation District (LTRID) and one (1) existing turnout from the FKC that can serve as sources of water for banking. Current piping infrastructure allows water diverted from the FKC turnout to be directed to both Phase 1 basins utilizing an existing lift station. The Tule River Intertie turnout only has the ability to supply the Phase 1 basin on APN 302-510-006, with pump back operations into the Tule River Intertie requiring additional infrastructure from an existing irrigation well adjacent to the basin to tie-in to the ditch as part of Phase 2. With the addition of the Phase 2 basins, gravity outlet pipes will be installed to allow Phase 1 basins to overflow into the adjacent Phase 2 basins.

Recharge Facility Operations Manner and Methods: The Project would primarily bank water from the FKC and the Tule River Intertie through existing turnout structures. It is possible that the Project might bank water from other systems, but separate approvals would be required and explored prior to utilization. As required by the existing PID Banking Policy, 10% to 30% of the total recharged water reported annually would be allocated to PID's storage master account. Recharge operations would be required to comply with the then current PID rules, regulations and policies. The ability for Setton to divert and convey water would be dependent on approval from the water entities, ensuring the operations of Rainbow IX Water Bank do not interfere with those of PID.

Recovery Facilities and Operations: Recovery from Project wells will not commence until an approved ETGSA Land Subsidence Monitoring and Management Plan is being implemented. Additionally, recovery

from Project wells will only occur after determination is made by PID and the ETGSA that the Project is operating in compliance with then current policies and programs established by PID and the ETGSA.

The Project would recover banked water in compliance with PID policies, rules and regulations (all constrained by lawful places of use) as follows:

Recovery within PID: Banked water may be recovered for use in PID through two means:

- <u>Direct Usage</u>: The Project wells and any other wells within PID may recover banked water for use within PID in accordance with the then current Recharge Policy and the Banking Policy adopted by PID; or
- <u>Pump-In:</u> Project wells may recover water into the Tule River Intertie for physical delivery within PID, Districts or lands within the Tule Subbasin (subject to the then current policies established by PID and LTRID).

Recovery within the ETGSA: The Project would be operated in compliance with requirements of the ETGSA GSP and subject the then current policies adopted by the ETGSA.

Recovery within the Tule Subbasin (as defined in DWR Bulletin 118): The Project would be operated in compliance with requirements of each of the then current adopted Tule Subbasin GSAs policies. Those policies are also likely to include procedures in which recharged water can be recovered from other wells within the various GSAs that are outside of PID.

All recovered water used for pump back into District facilities will need to meet the following requirements:

- 1. Flow meter to determine volume of flow into surface water system (see Water Accounting and Monitoring; Data Collection)
- 2. Water Quality Testing prior to pump back to ensure water quality meets Basin Plan water quality standards and Reclamation water quality requirements
- 3. Pump back location and methodologies approval from PID

Energy Facilities: The facility currently operates on a combination of electric and diesel-powered wells. Once Project wells are identified for banking/recovery activities, each will be documented, including source of power. All energy facilities shall be subject to local, state, and federal guidelines with regards to transmission and emission standards.

Current flow into the banking system occurs via gravity turnout from the Tule River Intertie and electric pump and pipeline from the FKC.

<u>Schedule</u>

Permitting: Existing Phase 1 basins currently operate as recharge basins, therefore nearly all required permitting and construction is complete. However, CEQA will be required to convert the existing Phase 1 recharge basins and proposed Phase 2 basins to banking facilities. Currently, Setton has hired a consultant to perform Initial Study (IS) encompassing both phases of the project to meet CEQA guidelines with PID acting as the lead agency. The schedule to conclude the CEQA process is estimated as follows:

October 2020:

• Complete first draft of the Project Initial Study

March 2021:

- Finalize Project Initial Study
- Submit Mitigated Negative Declaration (MND) to State Clearinghouse

April 2020:

- Review of MND and comments received by the public April 2021-May 2021:
- Adoption of MND

Construction of Phase 2 recharge basin shall require a Building Permit from the County of Tulare for the earthwork required for the proposed basins. A Dust Control Plan through the San Joaquin Valley Air Pollution Control District shall also be required as part of the Project. The construct of any new Project wells shall require approval of a Tulare County Well Permit Application.

Construction: The construction phase shall consist of earthwork to prepare the subgrade for recharge activities and build up berms around the perimeter of the recharge basin for water storage. Additional construction is limited to the modification of existing or installation of new Project wells to be capable of pumping back into PID canals.

Operational Commencement: Upon approval by the PID Board appointed manager, the operator would seek to receive credit for banked water immediately allowing for direct usage of banked water through Project and PID wells. After further investigation into the quality of water being produced by Project wells utilized for pump back, the operator will seek approval of this portion of the banking project at a later date.

Banking Facility Operation and Maintenance

Setton is responsible for managing, operating and maintaining the banking facility. PID will assist in managing the operation of District facilities. Setton would enter into agreements with the Districts which detail the conditions under which District facilities might be used and how the Districts would be reimbursed for the costs they incur in supporting the Project.

The Project would be maintained using normal farming and irrigation district practices to prevent invasive plants from migrating onto adjacent farms and to prevent/repair berm erosion and rodent burrows. During operation, water levels in recharge basins would generally be maintained less than 2 feet above surrounding ground levels and an operator would be on-call to inspect and quickly respond if the basin begins overfilling or encounters berm failure. Existing wells would be maintained and operated using normal farming and irrigation district practices.

<u>Banking Water Supply Source:</u> The Project would primarily bank water that is periodically available above current needs from the FKC_and the Tule River Intertie. The existing recharge basin facilities are able to receive water supply from the FKC and Tule River Intertie conveyance facility and would manage supply to the basins based on available water supply in the conveyance facilities sources.

Data Collection: The basins would require the following data collection to ensure accurate measurement of recharged, evaporated, banked and recovered water:

- Instantaneous and totalizing flow meters on each conveyance delivering water into banking basins (make/type of meter subject to approval from PID)
- Instantaneous and totalizing flow meters on each recovery well
- Uses of data from California Irrigation Managements Information System (CIMIS) meteorological Station 169 (Porterville) to estimate evaporative loss of applied water before it percolates into the ground.

Each flow meter is to be equipped with data logger to ensure a continuous record of operations. Readings would be manually recorded daily during operating periods. Each meter would be calibrated annually or as requested by PID. To the degree there is a discrepancy between landowner data and District records that cannot be reconciled; the record would be modified to reflect whichever records the parties deem most reliable.

Banked Water Accounting: In accordance with practices currently in use by Setton on the existing recharge basins, the amount of water banked would be computed in daily increments. The volume of applied water lost to evaporation prior banking would be estimated using data from CIMIS Station 169. The remaining volume after subtraction of evaporative losses would be reported to PID as the banked volume.

Surface Water Level Monitoring: Water level monitoring is managed by Setton which has staff working at all hours of the day, 365 days a year. During recharge events, staff will monitor the basin and if the water level rises within 1 foot of the basin berm crest, the operator will be notified. Setton will establish procedures to ensure that the operator adjusts or shuts off recharge operations to prevent overfilling.

Groundwater Level Monitoring: Groundwater levels would be measured in the nearest adjacent landowner-controlled wells (both irrigation and domestic, contingent on well owner approval) on a monthly basis during periods of recharge and recovery and twice a year (spring, fall) during non-banking activities. During recovery, if operations cause unacceptable drops in adjacent landowner well water levels, operations would be adjusted in accordance with the procedures summarized in Figure 1 of the Banking Facility Report (Appendix D). In the event the banking facility is located directly adjacent to permanent crops, piezometers or equivalent measuring devices should be installed to continuously monitor root zone intrusion and potential transpiration during banking activities.

Water Quality Monitoring: Recharged water, groundwater and recovered water quality would be monitored to ensure that water quality remains appropriate for designated beneficial uses as follows:

Initial Sampling

- Baseline sampling: all operable wells (irrigation and domestic) within a ¼ mile radius of Project at the facility would be initially sampled for constituents included in Table 2-3.
- Banked and recovered water: all Project wells and the nearest operable wells (irrigation and domestic) on the facility immediately adjacent to Project recharge facilities would be sampled annually for constituents included in Table 2-4.

Constituents	Analytical Method
Aluminum	EPA 200.7
Antimony	EPA 200.7
Arsenic	EPA 200.8
Asbestos	EPA Method 100 (TEM)
Barium	EPA 200.7
Beryllium	EPA 200.8
Boron	EPA 200.7
Cadmium	EPA 200.7
Calcium	EPA 200.7
Carbonates + bicarbonates	EPA 310.1
Chloride	SM 4500
Chromium	EPA 200.7
Color	EPA 110.2
Copper	EPA 200.7
Cyanide	EPA 335.2
1,2-Dibromo-3-Chloropropane (DBCP)	EPA 504.1
Ethylene Dibromide (Dibromoethane, EDB)	EPA 504.1
Fecal coliform	SM 9221E or 9223B
Fluoride	EPA 340.1
Foaming agents (MBAS)	(MBAS) EPA 425.1
Gross alpha	SM 7110C EPA 900.0
Iron	EPA 200.7
Magnesium	EPA 200.7
Manganese	EPA 200.7
Mercury	EPA 245.1
Methyl tert-butyl ether (MTBE)	EPA 8260B
Nickel	EPA 200.7
Nitrate as NO3	EPA 300
Nitrate + nitrite	EPA 335.3
Nitrite as N SM	SM 4500
Odor threshold	EPA 140.1
Perchlorate	EPA 314.0
Potassium	EPA 200.7
pH (Field)	EPA 150.1
Phosphorous	EPA 365.2
Selenium	EPA 200.8
Silver	EPA 200.7
Sodium	EPA 200.7
Sodium absorption ratio (SAR)	Calculated
Specific conductance (Field)	EPA 120.1
Sulfate	EPA 375.4
Temperature (Field)	EPA 170.1
Thallium	EPA 200.8
Thiobencarb	EPA 525/507 Full list
Total dissolved solids (TDS)	(TDS) EPA 160.3
Turbidity (Field)	EPA 180.1
Uranium	EPA 908.0
Zinc	EPA 200.7

Table 2-3: Adjacent Well Monitoring Constituents

Constituents	Units
Boron	EPA 200. 7
Calcium	EPA 200. 7
Carbonates + Bicarbonates	EPA 310. 1
Chloride	SM 4500
Magnesium	EPA 200. 7
Nitrate as N	EPA 300. 0
Potassium	EPA 200. 7
pH (Field)	EPA 150. 1
Sodium	EPA 200. 7
Specific conductance (Field)	EPA 120. 1
Sulfate	EPA 375. 4
Temperature (Field)	EPA 170. 1
Total dissolved solids (TDS)	EPA 160. 3

Table 2-4: Project Well Monitoring Constituents

Subsidence Monitoring: Significant subsidence (sinking of the ground surface) has occurred along the FKC in areas to the south of the Project site near Deer Creek due to dewatering of silty and clayey formations by pumpage from wells. While significant subsidence has not occurred in this area and the Project would cause a net gain of 10% to 30% of banked water to the aquifer, the potential impact of subsidence needs to be monitored. Subsidence is measured by comparing sequential measurements of land surface elevation at a location. This comparison is predicated on the assumption that the reference benchmark for computation of elevation is outside of the area within which subsidence would potentially occur.

Recovery from Project wells will not commence until an approved Land Subsidence Monitoring and Management Plan is being implemented . Additionally, recovery from Project wells will only occur after determination is made by Monitoring Committee that the Project is operating in compliance with the then current policies and programs established by PID and the ETGSA. However, at a minimum, subsidence monitoring would include the following elements:

- Base Station: Reference of all elevation measurements to a base station approved by PID;
- *Perimeter Benchmarks:* Placement of permanent benchmarks in four directions on the perimeter of each Project property;
- *Recovery Well Benchmarks:* Placement of permanent measurement points on each Project recovery well;
- *Baseline Measurements*: Measurement of the elevations prior to commencement of banked water recovery operations; and
- Annual Measurements: Measurement of the elevations of each benchmark annually.

Benchmarks would be constructed and monitored using procedures approved by the California Board for Professional Engineers and Land Surveyors and using appropriate guidelines promulgated by the National Geodetic Survey and the California Spatial Reference Center. Monitoring and Operational Constraint Plan (MOCP).

The banking facility would be operated and monitored in a manner to ensure that the beneficial effects are maximized while preventing significant unacceptable impacts to the aquifer, groundwater levels, groundwater quality, water quality in the Tule River Intertie and FKC. A Monitoring Committee shall be

formed to ensure that the District's interests, adjacent landowners and FKC interests are protected. The monitoring committee shall be made up of the following representatives:

- 1 seat for Setton;
- 2 seats for PID directors (potentially including the General Manager if desired by the PID Board);
- 1 seat for a representative of the Friant Water Authority;
- 1 seat for an adjacent landowner; and
- 1 seat for a landowner from another location within PID.

In order to protect the interest of all parties involved, the Monitoring Committee would oversee the implementation of this MOCP, including the resolution of disputes between Setton and a 3rd party unable to reach agreement on appropriate responses to complaints. Setton may make operational adjustment in response to data evaluation, complaints by 3rd parties or recommendations from the Monitoring Committee. Specifically, Setton may be required to cease operation of Project recovery wells by the Monitoring Committee or the Friant Water Authority if either of those parties have determined that the project wells are contributing to or causing subsidence in the vicinity of the Friant Kern Canal.

Figure 1 of the Banking Facility Report depicts the steps taken to evaluate for potential impacts, response to complaints and mitigation, if needed. Setton would be responsible for collecting and evaluating data to:

- Estimate the unacceptable impacts third-parties have occurred or may occur in the future as a result of Project operations when compared to conditions that would have occurred absent of the Project;
- Adjust Project operations to avoid unacceptable impacts to 3rd parties; and
- Respond to responsible complaints of unacceptable impacts as a result of Project operations.

Setton may make operational adjustments in response to data evaluations, complaints by third parties or recommendations from the Monitoring Committee. Specifically, Setton will be required to cease operation of Project recovery wells by the Monitoring Committee or the Friant Water Authority if either of those parties has determined that Project recovery wells are contributing to or causing subsidence in the vicinity of the Friant Kern Canal. Examples of other potential operational adjustments that may be imposed on Setton by the Monitoring Committee may include, but are not limited to:

- Shifting the locations, schedules and rates at which recharge, and recovery are being performed;
- Reimbursement for higher pumping costs;
- Well rehabilitation;
- Lowering a pump further down a well;
- Reimbursement for treatment costs;
- Installation of treatment systems;
- Providing an alternate water supply; and
- Installation of a new well

<u>Reporting</u>: Before commencement of the operation, the operator will provide water quality data relating to Project wells to be utilized for pump back into District. The results from the quality testing will be provided to the Board appointed manager for approval.

Subsidence monitoring results will be reported to the Monitoring Committee and the Friant Water Authority at the frequency that they require in the Subsidence Monitoring Program that they have authorized. Annual subsidence monitoring reports would be submitted to the monitoring committee, the FWA and Reclamation.

During periods of operation, Setton will submit monthly reports to PID which will include the following:

- The initial volumes in the banked water accounts
- The sources of water sent to the recharge basin turnouts
- Volumes of water discharged to the recharge basin
- Percolation rates (daily basis)
- Losses to evaporation (daily basis)
- Net volumes of recharged water (daily basis)
- The volumes of recharged water allocated to Setton and PID accounts in accordance with the Banking Policy
- The volumes of the banked water extracted or transferred to others, the places of use
- The ending volumes of water in the PID and Setton banked water accounts
- Depth to groundwater for key wells identified by the District

On January 15 of each year, regardless if there were any Project operations occurring, Setton will submit an annual report for the prior year. The year runs from October 1 through September 30. The report submitted to PID will include the annual totals for the information listed above and will additionally include the following information:

- A summary of operations and response to issues, if presented
- Tabulations of water levels, water quality, water volumes monitoring data
- A map presenting the distribution of total dissolved solids in monitored wells
- A map of the Spring and Fall groundwater elevations, including directions of groundwater flow
- Maps presenting the Spring and Fall depth to groundwater in wells

See Appendix A of the Water Banking Facility Report (Appendix D) for daily, monthly and annual monitoring and operation reporting logs.

2.2 Project Location

The basins are located between the City of Porterville and the Community of Poplar, south of Avenue 144, west of the FKC and east of Road 200 in Tulare County, California as depicted in **Attachment 1**. The Tulare County Assessor's Parcel Map Numbers (APNs) for the sites are 302-060-035 and 302-510-006, and situated in the northwest quadrant of Section 6, Township 22 South, Range 27 East and the southeast quadrant of Section 1, Township 22 South, Range 26 East, Mount Diablo Base Meridian, respectively.

The APNs where the basins are/will be located currently comprise of a single-family home, field crops and existing approximately 9 net acres of recharge basins (Phase 1). Based on existing reports for this site, the soil in the area is categorized as a Flamen and Exeter loam, considered to be a moderately well-drained and moderately permeable soil.

Topographically, the site is relatively flat. The site is within the Rural Valley Lands planning area (Valley Agriculture) and is zoned AE20. All properties adjacent to the project are also designated as Valley Agriculture under the County General Plan and are zoned AE20.

2.3 Other Permits and Approvals

No discretionary approvals through Tulare County are required for the proposed project.





Section 3

Evaluation of Environmental Impacts

Porterville Irrigation District

22086 Avenue 160 Porterville, CA 93257

SECTION 3 Evaluation of Environmental Impacts

Project Title: Rainbow IX Water Bank

This document is the Initial Study/Mitigated Negative Declaration for the proposed construction and operation of a groundwater banking project on approximately 50 acres. The project is located in the southwest portion of Tulare County within the PID Boundary. PID will act as the Lead Agency for this project pursuant to the California Environmental Quality Act (CEQA) and the CEQA Guidelines.

3.1 PURPOSE

The purpose of this environmental document is to implement the California Environmental Quality Act (CEQA). Section 15002(a) of the CEQA Guidelines describes the basic purposes of CEQA as follows.

- (1) Inform governmental decision-makers and the public about the potential, significant environmental effects of proposed activities.
- (2) Identify the ways that environmental damage can be avoided or significantly reduced.
- (3) Prevent significant, avoidable damage to the environment by requiring changes in projects through the use of alternatives or mitigation measures when the governmental agency finds the changes to be feasible.
- (4) Disclose to the public the reasons why a governmental agency approved the project in the manner the agency chose if significant environmental effects are involved.

This Initial Study of environmental impacts has been prepared to conform to the requirements of the California Environmental Quality Act (CEQA) (Public Resources Code Section 21000 et seq.) and the State CEQA Guidelines (California Code of Regulations Section 15000 et seq.). According to Section 15070, a public agency shall prepare or have prepared a proposed negative declaration for a project subject to CEQA when:

- (a) The initial study shows that there is no substantial evidence, in light of the whole record before the agency, that the project may have a significant effect on the environment, or
- (b) The initial study identifies potentially significant effects, but:
 - (1) Revisions in the project plans or proposals made by, or agreed to by the applicant before a proposed mitigated negative declaration and initial study are released for public review would avoid the effects or mitigate the effects to a point where clearly no significant effects would occur, and
 - (2) There is no substantial evidence, in light of the whole record before the agency, that the project as revised may have a significant effect on the environment.

3.2 INITIAL STUDY/MITIGATED NEGATIVE DECLARATION

- 1. **Project Title:** Rainbow IX Water Bank
- 2. Lead Agency: Porterville Irrigation District 22086 Avenue 160 Porterville, CA 93257 (559) 784-0716
- 3. Applicant: Porterville Irrigation District Contact Person: Sean Geivet 22086 Avenue 160 Porterville, CA 93257 (559) 784-0716
- 4. **Project Location:** The proposed project site is located in the south-west portion of Tulare County within the PID boundary, approximately 1 mile west of the City of Porterville. The proposed project would involve construction on approximately 50 acres within parcels 302-510-006 and 302-060-035.
- 5. **General Plan Designation:** The parcels involved in the proposed project are designated by the County of Tulare as the Rural Valley Lands Plan.
- 6. **Zoning Designation:** The project site is zoned by Tulare County as AE-20, or Exclusive Agriculture with a 20-acre minimum lot size.
- 7. **Project Description:** The proposed project will involve the construction of new recharge basins totaling 48 gross acres, a new inlet and pipeline to the Tule River Intertie from an existing irrigation well, and new gravity fed outlets from the Phase 1 basins to the Phase 2 basins. This project does not entail any modification to the Friant Kern Canal. The Project will incorporate 13 gross-acres of existing recharge basins, an existing turnout from the FKC, existing 15" and 30" pipelines, and six existing wells. The project facilities are summarized below. See Figure 3-1 for proposed site layout.
 - <u>Phase 1:</u> An existing 7 gross-acre recharge basin (5 net acres), an existing 6 gross-acre recharge basin (4 net acres) an existing turnout from the FKC, 0.56 miles of existing 15" pipeline, 0.83 miles of existing 30" pipeline, and six existing wells.
 - <u>Phase 2:</u> Construction of a 15 gross-acre recharge basin (11 net acres), a 33 gross-acre recharge basin (25 net acres), a new inlet from the Tule River intertie, a 15" pipeline from an existing irrigation well to the Tule River Intertie, and 15" PVC gravity-fed outlets from the Phase 1 basins to the Phase 2 basins.
 - <u>Future phases (potential</u>): May include developing additional recovery well or modifying existing as monitoring data becomes available.

The recharge operations, recovery operations, and Monitoring and Operational Constraints Plan of the proposed project are discussed in Section 2.1 - Project Description and Purpose. Figure 3-1, below, provides an overview of the proposed and existing facilities.

North Agriculture South Agriculture East Agriculture West Agriculture/Residential

- 9. **Required Approvals:** No discretionary approvals through Tulare County are required for the proposed project.
- 10. **Native American Consultation:** No tribes have requested to be notified of projects within PID for AB 52 tribal consultation
- 11. Parking and access: Vehicular access to the project will be available via Avenue 136, Avenue 144, and Rockford Road. A network of unpaved, private roads on the property provides full access to the project site. No new or additional parking spaces are proposed for the project. The project will not require any permanent, on-site employees during project operations. During construction, workers will utilize existing facility parking areas and/or temporary construction staging areas for parking of vehicles and equipment.
- 12. Landscaping and Design: The landscape and design plans will be required during building permit submittal.
- 13. Utilities and Electrical Services: All pumps involved with the proposed project will be operated using electrical motors drawing from existing farm power service lines. No other utility services will be required for the project. No wastewater will be generated and all stormwater will be contained onsite.

Acronyms

BMP	Best Management Practices
CAA	Clean Air Act
CCR	California Code of Regulation
CDFG	California Department of Fish and Game
CEQA	California Environmental Quality Act
CWA	California Water Act
DHS	Department of Health Services
FEIR	Final Environmental Impact Report
FPPA	Farmland Protection Policy Act
GSA	Groundwater Sustainability Agency
GSP	Groundwater Sustainability Plan
ISMND	Initial Study Mitigated Negative Declaration
LTRID	Lower Tule River Irrigation District
MCL	Maximum Contaminant Level
ND	Negative Declaration
NAC	Noise Abatement Criteria
PID	Pixley Irrigation District
RCRA	Resource Conservation and Recovery Act of 1976
RWQCB	Regional Water Quality Control Board
SHPO	State Historic Preservation Office
SJVAPCD	San Joaquin Valley Air Pollution Control District
SWPPP	Storm Water Pollution Prevention Plan



Rainbow IX Water Bank DRAFT Initial Study/Mitigated Negative Declaration

3.3 EVALUATION OF ENVIRONMENTAL IMPACTS

- A brief explanation is required for all answers except "no Impact" answers that are adequately support by the information sources a lead agency cites, in the parentheses following each question. A "No Impact" answer is adequately supported if the reference information sources show that the impact simply does not apply to projects like the one involved (e.g., the project falls outside a fault rupture zone). A "No Impact" answer should be explained where it is based on project-specific factors as well as general standards (e.g., the project will not expose sensitive receptors to pollutants, based on a project-specific screening analysis).
- 2. All answers must take account of the whole action involved, including off-site as well as on-site, cumulative as well as project-level, indirect as well as direct, and construction as well as operational impacts.
- 3. Once the lead agency has determined that a particular physical impact may occur, then the checklist answers must indicate whether the impact is potentially significant, less than significant with mitigation, or less than significant. "Potentially Significant Impact" is appropriate if there is substantial evidence that an effect may be significant. If there are one or more "Potentially Significant Impact" entries when the determination is made, an EIR if required.
- 4. "Negative Declaration: Less Than Significant With Mitigation Incorporated" applies where the incorporation of mitigation measures has reduced an effect from "Potentially Significant Impact" to a "Less Than Significant Impact." The lead agency must describe the mitigation measures, and briefly explain how they reduce the effect to a less than significant level (mitigation measures from "Earlier Analyses," as described in (5) below, may be cross-referenced).
- Earlier analyses may be used where, pursuant to the tiering, program EIR, or other CEQA process, an effect has been adequate analyzed in an earlier EIR or negative declaration. Section 15063(c) (3)(D). In this case, a brief discussion should identify the following.
 - a) Earlier Analysis Used. Identify and state where they are available for review.
 - b) Impacts Adequately Addressed. Identify which effects from the above checklist were within the scope of and adequately analyzed in an earlier document pursuant to applicable legal standards, and state whether such effects were addressed by mitigation measures based on the earlier analysis.
 - c) Mitigation Measures. For effects that are "Less than Significant with Mitigation Measures Incorporated." Describe and mitigation measures which were incorporated or refined from the earlier document and the extent to which they address site-specific conditions for the project.
- 6. Lead agencies are encouraged to incorporate into the checklist references to information sources for potential impacts (e.g., general plans, zoning ordinances). Reference to a previously prepared or outside document should, where appropriate, include a reference to the page or pages where the statement is substantiated.

3.4 ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED

The environmental factors checked below would be potentially affected by this project, involving at least one impact that is a "Potentially Significant Impact" as indicated by the checklist on the following pages.

- □ Aesthetics
- □ Agriculture and Forest Resources
- □ Air Quality
- ☑ Biological Resources
- ☑ Cultural Resources
- Energy
- ☑ Geology and soils

- Greenhouse Gas Emissions
 Hazards and Hazardous Materials
- □ Hydrology and Water Quality
- □ Land Use and Planning
- □ Mineral Resources
- □ Population

- Public Services
 - Recreation
 - □ Transportation
 - ☑ Tribal Cultural Resources
 - □ Utilities and Service System
 - □ Wildfire
 - Mandatory Findings of Significance

DETERMINATION: (To be completed by the Lead Agency) Where potential impacts are anticipated to be significant, mitigation measures will be required, so that impacts may be avoided or reduced to insignificant levels.

On the basis of this initial evaluation:

- □ I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION WILL BE PREPARED.
- ☑ I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.
- □ I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.
- □ I find that the proposed project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. A Negative Declaration is required, but it must analyze only the effects that remain to be addressed.
- □ I find that although the proposed project could have a significant effect on the environment because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is requested.

SIGNATURE

DATE

Sean Geivet, General Manager PRINTED NAME Porterville Irrigation District AGENCY

Rainbow IX Water Bank DRAFT Initial Study/Mitigated Negative Declaration

June 2021

3.5 ENVIRONMENTAL ANALYSIS

The following section provides an evaluation of the impact categories and questions contained in the checklist and identify mitigation measures, if applicable.

I. AESTHETICS

Except as provided in Public Resource Code Section 210999, would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less than Significant Impact	No Impact
a) Have a substantial adverse effect on a scenic vista?				Ŋ
 b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within state scenic highway? 				
c) In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from a publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?				Ŋ
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?				

Environmental Setting

The EIR for the Tulare County General Plan Update identifies the Sierra Nevada Mountains, Scenic Roadways, and historic settlements and places as the most prominent aesthetic resources within the County.

Sierra Nevada Mountains: The Sierra Nevada mountain range and its foothills stretch along the east area of the county and are a valuable aesthetic resource. Additionally, Sequoia National Park is located within the stretch of the Sierra Nevada Mountains located in Tulare County. Sequoia National Forest is a U.S. National Forest known for its mountain scenery and natural resources. Located directly north of Sequoia National Park is Kings Canyon National Park, a U.S. National Park also known for its towering sequoia trees and scenic vistas.

Scenic Roadways: The California Scenic Highway Program was established in 1963 by the state Legislature for the purpose of protecting and enhancing the natural beauty of California highways and adjacent corridors through conservation strategies. The State Scenic Highway System includes a list of highways that have either been officially designated or are eligible for designation. State laws affiliated with governing the scenic highway program can be found in Sections 260-263 in The Street and Highways Code.

Tulare County Designated Scenic Highways and Drives: Scenic highways and drives are roads bordered by mature and consistent landscaping that have area wide significance. They can be classified as rural roads that traverse land with outstanding natural scenic qualities, or ones which provide access to regionally significant scenic and recreational areas. The Tulare General Plan Update identifies preserving the rural agricultural characters of SR 99 and SR 65 following County-designated landscaped drives as valuable to the County and its communities:

State Designated Scenic Highway: The California Scenic Highway Mapping System identifies the following officially designated State Scenic Highways and highways eligible for designation in Tulare County:

- State Route 198 from Visalia to Three Rivers
- State Route 190 from Porterville to Ponderosa
- State Route 180 extending through Federal land into northern Tulare County

The following photos demonstrate the aesthetic character of the project area.



View of existing agricultural field on western property. Source: Live Oak



View of Existing Basin on eastern property. Source: Live Oak



View of existing pistachio orchard on Source: Live Oak



View of Existing Basin on eastern property. Source: Live Oak



View of FKC turnout (offsite) Source: Live Oak



View of existing basin and pipeline. Source: Live Oak

Regulatory Setting

State Scenic Highways: The State Scenic Highway Program is implemented by Caltrans and was developed to preserve the aesthetic quality of certain highway corridors. Highways included in this program are designated as scenic highways. A highway is designated as scenic based on how much of the natural landscape is visible to travelers, the quality of that landscape, and the extent to which development obstructs views of the landscape.

Tulare County General Plan: The Tulare County General Plan includes the following aesthetic resource goals and policies that are potentially applicable to the proposed project and Tulare County's aesthetic value:

- LU-7.12 Historic Buildings and Areas: The County shall encourage preservation of buildings and areas with special and recognized historic, architectural, or aesthetic value. New development should respect architecturally and historically significant buildings and areas. Landscaping, original roadways, sidewalks, and other public realm features of historic buildings or neighborhoods shall be restored or repaired wherever feasible.
- SL-1.2 Working Landscapes: The County shall require that new non-agricultural structures and infrastructure located in or adjacent to croplands, orchards, vineyards, and open rangelands be sited so as to not obstruct important viewsheds and to be designed to reflect unique relationships with the landscape by:
 - 1. Referencing traditional agricultural building forms and materials,
 - 2. Screening and breaking up parking and paving with landscaping, and
 - 3. Minimizing light pollution and bright signage.
- SL-1.3 Watercourses: The County shall protect visual access to, and the character of, Tulare County's scenic rivers, lakes, and irrigation canals by:
 - 1. Locating and designing new development to minimize visual impacts and obstruction of views of scenic watercourses from public lands and right-of-ways, and
 - 2. Maintaining the rural and natural character of landscape viewed from trails and watercourses used for public recreation.

Discussion

a) Would the project have a substantial adverse effect on a scenic vista?

No Impact: A scenic vista is defined as a viewpoint that provides expansive views of highly valued landscape for the benefit of the general public. The Scenic Landscapes Element of the County General Plan identifies the Sierra Nevada Mountains as the primary scenic vista within the County. The proposed project site is located approximately 8 miles west of the Sierra Nevada Foothills. The low profile of the proposed facilities, in conjunction with the distance between the proposed facilities to the scenic mountain range, would prevent any impacts to scenic vistas from occurring. There is *no impact*.

b) Would the project substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within state scenic highway?

No Impact: There are no Officially Designated State Scenic Highways within Tulare County. Highway 190 (Avenue 144) is the nearest Eligible State Scenic Highway and is located along the northern boundary of the project site. Although the site will be visible from Highway 190, it is not anticipated that the project will negatively affect the visual character of the area, and the project will not damage or remove any scenic resources such as trees, rock outcroppings, or historic buildings. There is *no impact*.

c) In non-urbanized areas, would the project substantially degrade the existing visual character or quality of the site and its surroundings? (Public views are those that are experienced from a publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?

No Impact: The proposed project site is located in a non-urbanized area characterized by agricultural activity. The proposed project does not include any components which would substantially degrade the existing visual character or quality of the site or its surroundings there is *no impact*.

d) Would the project create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?

No Impact: The proposed project does not include outdoor lighting or include any notable reflective materials that could result in impacts to day or nighttime views. There is *no impact.*

II. AGRICULTURE AND FOREST RESOURCES:

In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Department of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment project; and forest carbon measurement methodology provided in the Forest Protocols adopted by the California Air Resources Board. Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less than Significant Impact	No Impact
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?				Ŋ
b) Conflict with existing zoning for agricultural use, or a Williamson Act Contract?				V
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned timberland Production (as defined by Government Code section 51104(g)?				V
d) Result in the loss of forestland or conversion of forest land to non-forest use?				V
e) Involve other changes in the existing environment, which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forestland to non-forest use?				V

Agriculture is a vital component of the Tulare County's economy and is a significant source of the County's cultural identity. As such, preserving the productivity of agricultural lands is integral to maintaining the County's culture and economic viability.

The proposed project site is under Williamson Act Contract and is designated as Prime Farmland under the Important Farmland Mapping and Monitoring Program (FMMP). The project site is currently utilized for agriculture and groundwater recharge.

Regulatory Setting

California Land Conservation Act of 1965: The California Land Conservation Act of 1965, commonly referred to as the Williamson Act, allows local governments to enter into contracts with private landowners to restrict the activities on specific parcels of land to agricultural or open space uses. The landowners benefit from the contract by receiving greatly reduced property tax assessments. The California Land Conservation Act is overseen by the California Department of Conservation; however local governments are responsible for determining specific allowed uses and enforcing the contract.

California Farmland Mapping and Monitoring Program (FMMP): The FMMP is implemented by the California Department of Conservation (DOC) to conserve and protect agricultural lands within the State. Land is included in this program based on soil type, annual crop yields, and other factors that influence the quality of farmland. The FMMP mapping categories for the most important statewide farmland are as follows:

- **Prime Farmland** has the ideal physical and chemical composition for crop production. It has been used for irrigated production in the four years prior to classification and is capable of producing sustained yields.
- **Farmland of Statewide Importance** has also been used for irrigated production in the four years prior to classification and is only slightly poorer quality than Prime Farmland.
- **Unique Farmland** has been cropped in the four years prior to classification and does not meet the criteria for Prime Farmland or Farmland of Statewide Importance but has produced specific crops with high economic value.
- **Farmland of Local Importance** encompasses farmland that does not meet the criteria for the previous three categories. These may lack irrigation, produce major crops, be zoned as agricultural, and/or support dairy.
- *Grazing Land* has vegetation that is suitable for grazing livestock.

Tulare County General Plan: The Agriculture Element of the Tulare County General Plan includes the following agricultural resource goals and policies that are potentially applicable to the proposed project:

Goal AG-1 To promote the long-term conservation of productive and potentially- productive agricultural lands and to accommodate agricultural-support services and agriculturally-related activities that support the viability of agriculture and further the County's economic development goals.
- AG-1.3 Williamson Act: The County should promote the use of the California Land Conservation Act (Williamson Act) on all agricultural lands throughout the County located outside established UDBs and HDBs. However, this policy carries with it a caveat that support for the Williamson Act as a tax reduction component is premised on continued funding of the State subvention program that offsets the loss of property taxes.
- AG-1.14 Right-to-Farm Noticing: The County shall condition discretionary permits for special uses and residential development within or adjacent to agricultural areas upon the recording of a Right-to-Farm Notice (Ordinance Code of Tulare County, Part VII, residents in the area should be prepared to accept the inconveniences and discomfort associated with normal farming activities and that an established agricultural operation shall not be considered a nuisance due to changes in the surrounding area.

Tulare County Right to Farm Notice: Tulare County Ordinance No. 2931, also known as the Right-to-Farm Ordinance, was adopted to promote a good neighbor policy between agriculturalists and other residents. By making clear what rights each has when they live near one another, the ordinance protects agricultural land uses from conflicts with non-agricultural uses. It also helps purchasers and residents understand the inconveniences that may occur as the natural result of living in or near agricultural areas. The Ordinance Code of Tulare County, Part VII, Chapter 29, Section 07-29-1000 states the following:

TULARE COUNTY RIGHT-TO-FARM NOTICE

The County shall condition discretionary permits for special uses and residential development within or adjacent to agricultural areas upon the recording of a Right-to-Farm Notice (Ordinance Code of Tulare County, Part VII, Chapter 29, Section 07-29-1000 and following) which is an acknowledgment that residents in the area should be prepared to accept the inconveniences and discomfort associated with normal farming activities and that an established agricultural operation shall not be considered a nuisance due to changes in the surrounding area.



a) Would the project convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?

No Impact: The proposed project would involve construction on lands designated as Prime Farmland, however the project would not convert the land to non-agricultural use. The purpose of the project is to support agricultural activity by improving groundwater conditions and water supply.

The proposed project site is located in an area that is becoming increasingly vulnerable to the effects of climate change. Drought and increasing temperatures have resulted in a reduction of reliable surface water supplies for agriculture. The proposed project will increase climate change resiliency and sustain the region's agricultural viability by improving PID's ability to store excess surface water during wet years for use during dry years. Because the proposed project site will continue to serve an agricultural purpose, implementation of the project would not result in the conversion of farmland to nonagricultural use and there is *no impact*.

b) Would the project conflict with existing zoning for agricultural use, or a Williamson Act Contract?

No Impact: The proposed project site is currently zoned for agricultural use by Tulare County as AE-20 and is under a Williamson Act Contract, however the proposed project does not conflict with AE-20 zoning or Williamson Act Contract provisions. There is *no impact*.

c) Would the project conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned timberland Production (as defined by Government Code section 51104(g)?

No Impact: The project site is not zoned for forest or timberland production and there is no zone change proposed for the site. Therefore, *no impacts* would occur.

d) Would the project result in the loss of forestland or conversion of forest land to non-forest use?

No Impact: No conversion of forestland, as defined under Public Resource Code or General Code, will occur as a result of the project and there would be *no impacts*.

e) Would the project involve other changes in the existing environment, which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forestland to non-forest use?

No Impact: The project site is presently under active agriculture use. The implementation of this project would cause minor disturbance to farmland during installation and operation of the proposed pipeline, inlet structure, and groundwater recharge basin. However, the project itself is supplemental to agricultural production. Implementation of the project would not result in the conversion of farmland to nonagricultural use and there is *no impact*.

III. AIR QUALITY

Where available, the significance criteria established by the applicable air quality management district or air pollution control district may be relied upon to make the following determinations. Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less than Significant Impact	No Impact
a) Conflict with or obstruct implementation of the applicable air quality plan?				\checkmark
b) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?			Ŋ	
c) Expose sensitive receptors to substantial pollutant concentrations?				V
 Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people? 			Ŋ	

Environmental Setting

Air pollution is directly related to regional topography. Topographic features can either stimulate the movement of air or restrict air movement. California is divided into regional air basins based on topographic air drainage features. The proposed project site is within the San Joaquin Valley Air Basin, which is bordered by the Sierra Nevada Mountains to the east, Coastal Ranges to the west, and the Tehachapi Mountains to the south.

The mountain ranges surrounding the San Joaquin Valley Air Basin (SJVAB) serve to restrict air movement and prevent the dispersal of pollution. As a result, the SJVAB is highly susceptible to pollution accumulation over time. As shown in the Table 3-1, the SJVAB is in nonattainment for several pollutant standards.

s					
ere					
fied					
^b See CCR Title 17 Sections 60200-60210					
^c On September 25, 2008, EPA redesignated the San Joaquin Valley to attainment for the PM10 National Ambient Air Quality Standard					

^d The Valley is designated nonattainment for the 1997 PM2.5 NAAQS. EPA designated the Valley as nonattainment for the 2006 PM2.5

NAAQS on November 13, 2009 (effective December 14, 2009).

^e Though the Valley was initially classified as serious nonattainment for the 1997 8-hour ozone standard, EPA approved Valley reclassification to extreme nonattainment in the Federal Register on May 5, 2010 (effective June 4, 2010).

^f Effective June 15, 2005, the U.S. Environmental Protection Agency (EPA) revoked the federal 1-hour ozone standard, including associated designations and classifications. EPA had previously classified the SJVAB as extreme nonattainment for this standard. EPA approved the 2004 Extreme Ozone Attainment Demonstration Plan on March 8, 2010 (effective April 7, 2010). Many applicable requirements for extreme 1-hour ozone nonattainment areas continue to apply to the SJVAB.

Table 3-1. San Joaquin Valley Attainment Status; Source: SJVAPCD

Regulatory Setting

Federal Clean Air Act – The 1977 Federal Clean Air Act (CAA) authorized the establishment of the National Ambient Air Quality Standards (NAAQS) and set deadlines for their attainment. The Clean Air Act identifies specific emission reduction goals, requires both a demonstration of reasonable further progress and an attainment demonstration, and incorporates more stringent sanctions for failure to meet interim milestones. The U.S. EPA is the federal agency charged with administering the Act and other air quality-related legislation. EPA's principal functions include setting NAAQS; establishing minimum national emission limits for major sources of pollution; and promulgating regulations. Under CAA, the NCCAB is identified as an attainment area for all pollutants.

California Clean Air Act – California Air Resources Board coordinates and oversees both state and federal air pollution control programs in California. As part of this responsibility, California Air Resources Board monitors existing air quality, establishes California Ambient Air Quality Standards, and limits allowable emissions from vehicular sources. Regulatory authority within established air basins is provided by air pollution control and management districts, which control stationary-source and most categories of area-source emissions and develop regional air quality plans. The project is located within the jurisdiction of the San Joaquin Valley Air Pollution Control District.

The state and federal standards for the criteria pollutants are presented in Section 8.4 of The San Joaquin Valley Unified Air Pollution Control District's 2015 "Guidance for Assessing and Mitigating Air Quality Impacts". These standards are designed to protect public health and welfare. The "primary" standards have been established to protect the public health. The "secondary" standards are intended to protect the nation's welfare and account for air pollutant effects on soils, water, visibility, materials, vegetation and other aspects of general welfare. The U.S. EPA revoked the national 1-hour ozone standard on June 15, 2005, and the annual PM₁₀ standard on September 21, 2006, when a new PM_{2.5} 24-hour standard was established.

	Averaging Californ		California Standards ¹		National Star	ndards²
Pollutant Time		Concentration ³	Method ⁴	Primary ^{3,5}	Secondary ^{3,6}	Method ⁷
	1 Hour	0.09 ppm (180 μg/m³)	Ultraviolet		Same as	Ultraviolet & Hour
Ozone (03)	8 Hour	0.070 ppm (137 μg/m³)	Oltraviolet – Photometry	0.075 ppm (147 μg/m³)	Primary Standard	Photometry
Respirable	24 Hour	50 μg/m	Cravimatric or Bata	150 μg/m³	Same as	Inertial Separation
Particulate Matter (PM ₁₀)	Annual Arithmetic Mean	20 µg/m3	Gravimetric or Beta - Attenuation		Primary Standard	and Gravimetric Annual Analysis
	24 Hour			35 μg/m³		

	Averaging	California Standards ¹		National Standards ²		ndards²
Pollutant	Time	Concentration ³	Method⁴	Primary ^{3,5}	Secondary ^{3,6}	Method ⁷
Fine Particulate Matter (PM _{2.5})	Annual Arithmetic Mean	12 μg/m³	Gravimetric or Beta Attenuation	15 μg/m³	Same as Primary Standard	Inertial Separation and Gravimetric Annual Analysis
	1 Hour	20 ppm (23 mg/m ³)		35 ppm (40 mg/m ³)		
Carbon Monoxide (CO)	8 Hour	9.0 ppm (10 mg/m ³)	Non-Dispersive Infrared Photometry (NDIR)	9 ppm (10 mg/m ³)		Non-Dispersive Infrared Photometry (NDIR)
	8 Hour (Lake Tahoe)	6 ppm (7 mg/m ³)				
Nitrogen Dioxide	1 Hour	0.18 ppm (339 μg/m³)	Gas Phase	100 ppb (188 μg/m³)		Gas Phase Annual
(NO ₂) ⁸	Arithmetic Mean	0.030 ppm (57 μg/m³)	Chemiluminescence	53 ppb (100 μg/m³)	Same as Primary Standard	Chemiluminescence
	1 Hour	0.25 ppm (655 μg/m³)		75 ppb (196 μg/m³)	-	
	3 Hour			-	0.5 ppm (1300 μg/m³)	Ultraviolet
Sulfur Dioxide	24 Hour	0.04 ppm (105 μg/m³)	Ultraviolet Fluorescence	0.14 ppm (for certain areas)9		Spectrophotometry (Pararosaniline Method)
	Annual Arithmetic Mean			0.030 ppm (for certain areas)9		
	30 Day Average	1.5 μg/m³				
Lead ^{10,11}	Calendar Quarter		Atomic Absorption	1.5 μg/m3 (for certain areas)11	Same as Primary	High Volume Sampler and Atomic Absorption
	Rolling 3- Month Average			0.15 μg/m³	Standard	
Visibility Reducing Particles ¹²	8 Hour	See footnote 12	Beta Attenuation and Transmittance through Filter Tape			
Sulfates	24 Hour	25 μg/m³	lon Chromatography	No National Standard		
Hydrogen Sulfide	1 Hour	0.03 ppm (42 μg/m ³)	Ultraviolet Fluorescence			
Vinyl Chloride ¹⁰	24 Hour	0.01 ppm (26 µg/m ³)	Gas Chromatography			

Averaging California Standards ¹			National Star	ndards ²		
Pollutant	Time	Concentration ³	Method⁴	Primary ^{3,5}	Secondary ^{3,6}	Method ⁷
 California standards f PM2.5, and visibility red standards are listed in ti National standards (o ozone standard is attain the standard. For PM10, 150 µg/m3 is equal to o are equal to or less than 3. Concentration expres and a reference pressur torr; ppm in this table red Any equivalent measus standard may be used. National Primary Star 6. National Secondary S Reference method as reference method" and 8. To attain the 1-hour r exceed 100 ppb. Note ti compare the national st ppb are identical to 0.05 On June 2, 2010, a ne national standard, the 3 SO2 national standard 10. The ARB has identifi actions allow for the im 11. The national standar remains in effect until o 1978 standard remains In 1989, the ARB cor equivalents, which are " respectively. 	or ozone, carbon ucing particles), a re Table of Standa ther than ozone, ed when the four the 24 hour stan r less than one. Co sed first in units in e of 760 torr. Mos effers to ppm by vo urement method v dards: The levels tandards: The levels tandards: The levels tandards: The levels tandards: The levels tandards to the ca 3 ppm and 0.100 w 1-hour SO2 stan -year average of t (24-hour and ann 971 standards, is d to the California ed lead and vinyl polementation of c d for lead was rev ne year after an in effect until imp iverted both the g extinction of 0.23	monoxide (except 8-hou rer values that are not to ards in Section 70200 of particulate matter, and t th highest 8-hour conce- dard is attained when th or PM2.5, the 24 hour st intact the U.S. EPA for fu n which it was promulga st measurements of air co- olume, or micromoles of which can be shown to t of air quality necessary, els of air quality necessary, els of air quality necessary U.S. EPA. An "equivalen d by the U.S. EPA. the 3-year average of th andards are in units of p Iifornia standards the ur ppm, respectively. ndard was established a he annual 99 th percentil ual) remain in effect unt se 1971 standards remai in units of parts per billi is standard the units can chloride as 'toxic air con ontrol measures at level vised on October 15, 200 rea is designated for the general statewide 10-mil	In Lake Tahoe), sulfur dioxide (be exceeded. All others are n Title 17 of the California Code chose based on annual arithm intration measured at each site expected number of days p andard is attained when 98 per ther clarification and current ted. Equivalent units given in juality are to be corrected to a pollutant per mole of gas. he satisfaction of the ARB to g with an adequate margin of s ry to protect the public welfar t method" of measurement m he annual 98 th percentile of th barts per billion (ppb). Californ hits can be converted from pp and the existing 24-hour and are e of the 1-hour daily maximur il one year after an area is des n in effect until implementatic on (ppb). California standards be converted to ppm. In this c taminants' with no threshold s below the ambient concentr 8 to a rolling 3-month averag e visibility standard and the L tinction of 0.07 per kilometer'	(1 and 24 hour), in to to be equaled of to be equaled of egulations. etic mean) are not e in a year, avera er calendar year er er en of the dail is national policies parentheses are a reference temp give equivalent reference temp give equivalent reference tagety to protect the from any know hay be used but in e 1-hour daily mila standards are b to ppm. In this in unal primary stam concentrations signated for the 2 on plans to attain are in units of privase, the national level of exposure rations specified and are approvake Tahoe 30-mil ' for the statewice the statewice taget of taget of the statewice taget of taget of the statewice taget of taget of taget of the statewice taget of the statewice taget of	introgen dioxide, and d or exceeded. Califor ot to be exceeded ma ged over three years with a 24-hour avera y concentrations, avera y concentrations, avera based upon a refere- berature of 25°C and esults at or near the l the public health. who or anticipated adv nust have a "consiste aximum concentratic in units of parts per case, the national st andards were revoke s at each site must no 2010 standard, excep nor maintain the 201 arts per million (ppm I standard of 75 ppb e for adverse health of for these pollutants. I standard (1.5 µg/m) ed nonattainment for ed. le visibility standard de and Lake Tahoe Ai	d particulate matter (PM10, rnia ambient air quality ore than once a year. The s, is equal to or less than age concentration above eraged over three years, nce temperature of 25°C a reference pressure of 760 level of the air quality verse effects of a pollutant. ent relationship to the ons at each site must not million (ppm). To directly randards of 53 ppb and 100 rd. To attain the 1-hour ot exceed 75 ppb. The 1971 ot that in areas designated LO standards are approved. .). To directly compare the is identical to 0.075 ppm. effects determined. These 3 as a quarterly average) r the 1978 standard, the to instrumental ir Basin standards,

Table 3-2. Ambient Air Quality Standards; Source: SJVAPCD

San Joaquin Valley Air Pollution Control District (SJVAPCD) - The SJVAPCD is responsible for enforcing air quality standards in the project area. To meet state and federal air quality objectives, the SJVAPCD adopted the following thresholds of significance for projects:

		Operational Emissions			
Pollutant/Precursor	Construction Emissions	Permitted Equipment and Activities	Non-Permitted Equipment and Activities		
	Emissions (tpy)	Emissions (tpy)	Emissions (tpy)		
со	100	100	100		
Nox	10	10	10		
ROG	10	10	10		
SOx	27	27	27		
PM10	15	15	15		
PM2.5	15	15	15		

Table 3-3. SJVAPCD Thresholds of Significance for Criteria Pollutants; Source: SJVAPCD

The following SJVAPCD rules and regulations may apply to the proposed project:

- **Rule 3135:** Dust Control Plan Fee. All projects which include construction, demolition, excavation, extraction, and/or other earth moving activities as defined by Regulation VIII (Described below) are required to submit a Dust Control Plan and required fees to mitigate impacts related to dust.
- **Rule 4101:** Visible Emissions. District Rule 4101 prohibits visible emissions of air contaminants that are dark in color and/or have the potential to obstruct visibility.
- **Rule 9510:** Indirect Source Review (ISR). This rule reduces the impact PM10 and NOX emissions from growth on the SJVB. This rule places application and emission reduction requirements on applicable development projects in order to reduce emissions through onsite mitigation, offsite SJVAPCD administered projects, or a combination of the two. This project will submit an Air Impact Assessment (AIA) application in accordance with Rule 9510's requirements.
- **Regulation VIII:** Fugitive PM10 Prohibitions. Regulation VIII is composed of eight rules which together aim to limit PM10 emissions by reducing fugitive dust. These rules contain required management practices to limit PM10 emissions during construction, demolition, excavation, extraction, and/or other earth moving activities.

Discussion

a) Would the project conflict with or obstruct implementation of the applicable air quality plan?

No Impact: The proposed project is located within the boundaries of the San Joaquin Valley Air Pollution Control District (SJVAPCD) and would result in air pollutant emissions that are regulated by the air district during both its construction and operational phases. The SJVAPCD is responsible for bringing air quality in Tulare County into compliance with federal and state air quality standards. The air district has Particulate Matter (PM) plans, Ozone Plans, and Carbon Monoxide Plans that serve as the clean air plan for the basin. Together, these plans quantify the required emission reductions to meet federal and state air quality standards and provide strategies to meet these standards.

Construction Phase. Project construction would generate pollutant emissions from the following construction activities: site preparation, grading, trenching, and building construction. The construction related emissions from these activities were calculated using CalEEMod. The full CalEEMod Report can be found in Appendix A. As shown in Table 3-4 below, project construction related emissions do not exceed the thresholds established by the SJVAPCD.

	СО	ROG	SOx	Nox	PM10	PM2.5
	(tpy)	(tpy)	(tpy)*	(tpy)	(tpy)	(tpy)
Emissions Generated from Project Construction	1.0788	0.1763	0.00234	1.9170	0.5755	0.3350
SJVAPCD Thresholds of Significance 100 10 27 10 15 15						
*Threshold established by SJVAPCD for SOx, however emissions are reported as SO2 by CalEEMod.						

Table 3-4. Projected Project Emissions Compared to SJVAPCD Thresholds of Significance for Criteria Pollutants related to Construction; Source: SJVAPCD, CalEEMod Analysis (Appendix A)

Operational Phase. Implementation of the proposed project would result in some long-term emissions due to PID employee trips required for long-term maintenance. The Full CalEEMod Reports can be found in Appendix A. As shown in Table 3-5 below, the project's operational emissions do not exceed the thresholds established by the SJVAPCD.

	СО	ROG	SOx	Nox	PM10	PM2.5	
	(tpy)	(tpy)	(tpy)*	(tpy)	(tpy)	(tpy)	
Operational Emissions	0.00046	0.1863	0.0	0.0	0.0	0.0	
SJVAPCD Thresholds of Significance 100 10 27 10 15 15							
*Threshold established by SIVAPCD for SQx, however emissions are reported as SQ2 by CalFEMod.							

Table 3-5. Projected Project Emissions Compared to SJVAPCD Thresholds of Significance for Criteria Pollutants related to Operations. Source: SJVAPCD, CalEEMod Analysis (Appendix A)

Because the emissions from both construction and operation of the proposed project would be below the thresholds of significance established by the SJVAPCD, the project would not conflict with or obstruct implementation of an applicable air quality plan and there is *no impact*.

b) Would the project result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?

Less Than Significant Impact: The SJVAPCD accounts for cumulative impacts to air quality in Section 1.8 "Thresholds of Significance – Cumulative Impacts" in its 2015 Guide for Assessing and Mitigating Air Quality Impacts. The SJVAPCD considered basin-wide cumulative impacts to air quality when developing its significance thresholds. Because construction and operational emissions are below the significance thresholds adopted by the air district, and compliance with SJVAPCD rules will address any cumulative impacts regarding operational emissions, impacts regarding cumulative emissions would be *less than significant*.

c) Would the project expose sensitive receptors to substantial pollutant concentrations?

No Impact: Emissions would be generated during construction and (less so) operation of the proposed project. The proposed project does not involve any features that would typically cause substantial pollutant concentrations and emissions will be regulated by the SJVAPCD to ensure pollutant concentrations remain below acceptable thresholds. The project does not include any project components identified by the California Air Resources Board that could potentially impact any sensitive receptors. These include heavily traveled roads, distribution centers, fueling stations, and dry-cleaning operations. The project would not expose sensitive receptors to substantial pollutant concentrations. There is *no impact*.

d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?

Less Than Significant Impact: Although some typical construction-related odors would be generated during project construction, these odors are not anticipated to affect a substantial number of people or be particularly adverse. The project does not include any operational components that would typically result in adverse odors. The impact is less than significant.

IV. BIOLOGICAL RESOURCES

Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less than Significant Impact	No Impact
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish & Game or U.S. fish and Wildlife Service?		Ø		
 b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or US Fish and Wildlife Service? 				Ŋ
c) Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through director removal, filling, hydrological interruption, or other means?			M	
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?				Ŋ
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?				Ø
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?				V

Discussion for this section originates from the Biological Evaluation that was prepared for this project by Live Oak Associates, Inc. to identify sensitive biological resources, provide project impact analysis, and suggest mitigation measures. The full document can be found in Appendix B.

Environmental Setting

LOA conducted a reconnaissance-level field survey of the project site on June 2 and August 4 2020. The surveys consisted of walking and driving through the project site while identifying the principal land uses and biotic habitats of the site, identifying plant and animal species encountered, and assessing the suitability of the site's habitats for special status species. At the time of the field survey, the project site consisted of a disced agricultural field, pistachio orchards, existing recharge basins, agricultural access roads, and disturbed areas surrounding these uses. Four land uses/biotic habitats were identified within

the project site: agricultural field, orchard, recharge basin, and ruderal. The site is situated within a matrix of agricultural and residential uses.

Regulatory Setting

Federal Endangered Species Act (FESA): defines an *endangered species* as "any species or subspecies that is in danger of extinction throughout all or a significant portion of its range." A threatened species is defined as "any species or subspecies that is likely to become an endangered species within the foreseeable future throughout all or a significant portion of its range."

The Federal Migratory Bird Treaty Act (FMBTA: 16 USC 703-712): FMBTA prohibits killing, possessing, or trading in any bird species covered in one of four international conventions to which the United States is a party, except in accordance with regulations prescribed by the Secretary of the Interior. The name of the act is misleading, as it actually covers almost all birds native to the United States, even those that are non-migratory. The FMBTA encompasses whole birds, parts of birds, and bird nests and eggs.

Although the USFWS and its parent administration, the U.S. Department of the Interior, have traditionally interpreted the FMBTA as prohibiting incidental as well as intentional "take" of birds, a January 2018 legal opinion issued by the Department of the Interior now states that incidental take of migratory birds while engaging in otherwise lawful activities is permissible under the FMBTA. However, California Fish and Game Code makes it unlawful to take or possess any non-game bird covered by the FMBTA (Section 3513), as well as any other native non-game bird (Section 3800), even if incidental to lawful activities.

Birds of Prey (CA Fish and Game Code Section 3503.5):Birds of prey are protected in California under provisions of the Fish and Game Code (Section 3503.5), which states that it is unlawful to take, possess, or destroy any birds in the order Falconiformes (hawks and eagles) or Strigiformes (owls), as well as their nests and eggs. The bald eagle and golden eagle are afforded additional protection under the federal Bald and Golden Eagle Protection Act (16 USC 668), which makes it unlawful to kill birds or their eggs.

Clean Water Act: Section 404 of the Clean Water Act of (1972) is to maintain, restore, and enhance the physical, chemical, and biological integrity of the nation's waters. Under Section 404 of the Clean Water Act, the US Army Corps of Engineers (USACE) regulates discharges of dredged and fill materials into "waters of the United States" (jurisdictional waters). Waters of the US including navigable waters of the United States, interstate waters, tidally influenced waters, and all other waters where the use, degradation, or destruction of the waters could affect interstate or foreign commerce, tributaries to any of these waters, and wetlands that meet any of these criteria or that are adjacent to any of these waters or their tributaries.

California Endangered Species Act (CESA): prohibits the take of any state-listed threatened and endangered species. CESA defines *take* as "any action or attempt to hunt, pursue, catch, capture, or kill any listed species." If the proposed project results in a take of a listed species, a permit pursuant to Section 2080 of CESA is required from the CDFG.

a) Would the project have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish & Game or U.S. fish and Wildlife Service?

<u>Less Than Significant Impact with Mitigation Incorporation</u>: Seven special status animal species may occur on the site from time to time. Of these, there are four species for which mitigation measures would be required to ensure significant impacts do not occur. These special status species and their respective mitigation measures are described below.

San Joaquin Kit Fox: The project site consists primarily of intensively maintained lands of limited value for the San Joaquin kit fox (Vulpes macrotis mutica) (SJKF), and this species has not been documented in the project vicinity for over 25 years. However, because the SJKF is wide-ranging and adaptable, there is some potential for it to pass through the site from time to time, possibly foraging in the site's agricultural field and denning along the margins of the field or recharge basins. If one or more individuals of this species are present on site at the time of construction or ground-disturbing operations and maintenance activities, they may be vulnerable to project-related injury or mortality. Project-related injury or mortality of the SJKF is considered a potentially significant impact of the project under CEQA. The following mitigation measures will be implemented to prevent significant impacts from occurring to the San Joaquin Kit Fox.

Mitigation Measure BIO-1a: (Preconstruction Surveys). Preconstruction surveys for the SJKF shall be conducted no less than 14 days and no more than 30 days prior to the start of Phase 2 construction, future recovery well development, and any operations and maintenance activities involving ground disturbance. Each survey is to cover the work area(s) in question and adjacent lands within 200 feet ("survey area"). For each survey, the primary objective will be to identify kit fox habitat features (e.g., potential dens and refugia) within the survey area and evaluate their use by kit foxes. If an active kit fox den is detected, the USFWS shall be contacted immediately to determine the best course of action. For any given project activity requiring preconstruction surveys, surveys will be repeated following any lapses in construction of 30 days or more.

Mitigation Measure BIO-1b: (Avoidance). Should active kit fox dens be detected during preconstruction surveys, the Sacramento Field Office of the USFWS and the Fresno Field Office of CDFW will be notified. A disturbance-free buffer will be established around the burrows in consultation with the USFWS and CDFW, to be maintained until an agency-approved biologist has determined that the burrows have been abandoned.

Mitigation Measure BIO-1c: (Minimization). During Phase 2 construction, future recovery well development, and operations and maintenance activities involving ground disturbance, the Construction and Ongoing Operational Requirements section of the Standardized Recommendations shall be fully implemented to minimize potential impacts on the SJKF.

Mitigation Measure BIO-1d: (Employee Education Program). An Employee Education Program shall be developed by a qualified biologist and presented by the applicant or their representative to any personnel or contractors that will be involved with Phase 2 construction, future recovery well development, and ground-disturbing operations and maintenance activities, prior to those

individuals being allowed to perform work on site. The program will include a description of the SJKF and its habitat needs; a report of the occurrence of kit fox in the project vicinity; an explanation of the status of the species and its protection under the Endangered Species Act; and a list of the measures being taken to reduce impacts to the species during construction. Attendees will be provided a handout with all of the training information included on it.

Mitigation Measure BIO-1e: (Mortality Reporting). The Sacramento Field Office of the USFWS and the Fresno Field Office of CDFW will be notified in writing within three working days in case of the accidental death or injury to a San Joaquin kit fox during construction. Notification must include the date, time, location of the incident or of the finding of a dead or injured animal, and any other pertinent information.

Implementation of the above measures will reduce potential impacts to the San Joaquin kit fox from project-related injury or mortality to a less than significant level under CEQA, and will ensure compliance with state and federal laws protecting this species.

Burrowing Owl: The site's habitats are only marginally suitable for the burrowing owl (Athene cunicularia) and burrowing owls have never been documented in the project vicinity; the closest known occurrences are more than 10 miles away. However, should this species occur in the area, there is some potential for it to nest or roost in the site's ruderal areas or along the margins of the agricultural field and recharge basins, and to use the field and basins for foraging. Burrowing owls are highly mobile while foraging, and it is anticipated that any burrowing owls attempting to forage on site at the time of construction would simply fly away from construction disturbance. However, if burrowing owls are occupying burrows on site at the time of construction or ground-disturbing operations and maintenance activities, owls could be vulnerable to project-related injury or mortality. If construction or ground-disturbing operations and maintenance activities occur during the nesting season, burrowing owls could be disturbed by such activities such that they would abandon their young. Project-related injury, mortality, or disturbance of burrowing owls is considered a potentially significant impact under CEQA. The following mitigation measures will be implemented to ensure impacts to burrowing owl are less than significant.

Mitigation Measure BIO-2a: (Take Avoidance Surveys). Take avoidance surveys for burrowing owls shall be conducted by a qualified biologist within 30 days prior to the start of Phase 2 construction, future recovery well development, and any operations and maintenance activities involving ground disturbance. The surveys will be conducted according to methods described in the Staff Report on Burrowing Owl Mitigation (CDFG 2012). Each survey is to cover the work area(s) in question and adjacent lands within 200 meters, where potential nesting or roosting habitat is present ("survey area").

Mitigation Measure BIO-2b: (Avoidance of Nest Burrows). If construction or ground-disturbing operations and maintenance activities are to occur during the breeding season (February 1-August 31) and active nest burrows are identified within the survey area, a 200-meter disturbance-free buffer will be established around each burrow. The buffers will be enclosed with temporary fencing to prevent encroachment by construction equipment and workers. Buffers will remain in place for the duration of the breeding season, unless otherwise arranged with CDFW. After the breeding season, passive relocation of any remaining owls may take place as described below.

Mitigation Measure BIO-2c: (Avoidance or Passive Relocation of Resident Owls). During the nonbreeding season (September 1-January 31), resident owls occupying burrows in work areas associated with Phase 2 construction, future recovery well development, or ground-disturbing operations and maintenance activities may either be avoided, or passively relocated to alternative habitat. If the applicant chooses to avoid active owl burrows within the work area during the nonbreeding season, a 50-meter disturbance-free buffer will be established around these burrows. The buffers will be enclosed with temporary fencing, and will remain in place until a qualified biologist determines that the burrows are no longer active. If the applicant chooses to passively relocate owls during the non-breeding season, this activity will be conducted in accordance with a relocation plan prepared by a qualified biologist.

Compliance with the above mitigation measures will reduce potential impacts to the burrowing owl from project-related injury, mortality, or disturbance to a less than significant level under CEQA, and will ensure that the project is in compliance with state and federal laws protecting this species.

Swainson's Hawk: Swainson's hawks (Buteo swainsoni) are occasionally sighted in the project vicinity, and there is a known nesting occurrence approximately 2 miles northeast of the project site. Although nesting habitat is absent from the project site itself, Swainson's hawks could potentially nest in ornamental trees on nearby rural residential properties, and could forage in the site's agricultural field and basins from time to time. Construction activities do not have the potential to injure or kill foraging Swainson's hawks because the Swainson's hawk is highly mobile while foraging and would be expected to simply fly away from construction disturbance. However, if Swainson's hawks are nesting adjacent to work areas at the time of construction or ground-disturbing operations and maintenance activities, hawks could be disturbed and possibly abandon their nests. Project-related disturbance of nesting Swainson's hawks is considered a potentially significant impact of the project under CEQA. The applicant will implement the following measures to avoid and minimize the potential for project-related disturbance of nesting Swainson's hawks.

Mitigation Measure BIO-3a: (Construction Timing). If feasible, Phase 2 construction, future recovery well development, and ground-disturbing operations and maintenance activities will occur entirely outside the Swainson's hawk nesting season, typically defined as March 1-September 15.

Mitigation Measure BIO-3b: (Preconstruction Surveys). If Phase 2 construction, future recovery well development, or ground-disturbing operations and maintenance activities must occur between March 1 and September 15, then within 10 days prior to the start of work, a qualified biologist will conduct preconstruction surveys for Swainson's hawk nests on and within ½ mile of the work area(s) in question.

Mitigation Measure BIO-3c: (Avoidance). Should any active nests be identified, the biologist will establish a suitable disturbance-free buffer around the nest. This buffer will be identified on the ground with flagging or fencing, and will be maintained until the biologist has determined that the young have fledged.

Implementation of these measures will reduce potential impacts to the Swainson's hawk from project-related disturbance to a less than significant level under CEQA, and ensure compliance with state and federal laws protecting this species.

Tricolored Blackbid and Other Nesting Birds and Raptors: The project site has the potential to be used for nesting by a number of avian species protected by state and federal laws. When planted to a suitable crop like wheat or triticale, the site's agricultural field could support nesting by the red-winged blackbird, and possibly the tricolored blackbird (Agelaius tricolor), which is listed as threatened under the California Endangered Species Act. House finches, black phoebes, and other birds that nest on human-made structures may nest on existing well infrastructure or turnouts. Disturbance-tolerant, ground-nesting species such as the mourning dove or killdeer could nest in virtually any part of the project site. Although the site's immature pistachio trees are unlikely to be used for nesting based on their current growth stage, they may provide suitable nesting habitat for a variety of species in future years. If any birds were to be nesting on or adjacent to work areas at the time of construction or certain operations and maintenance activities, they could be injured, killed, or disturbed such that they would abandon their nests. Project-related injury or mortality of nesting birds or disturbance leading to nest abandonment would violate state and federal laws and be considered a significant impact of the project under CEQA. The applicant will implement the following measures to avoid and minimize the potential for project-related mortality/disturbance of nesting birds and raptors, as necessary.

Mitigation Measure BIO-4a: (Construction Timing). If feasible, Phase 2 construction, future recovery well development, and operations and maintenance activities involving ground disturbance and/or vegetation removal will take place entirely outside of the avian nesting season, typically defined as February 1 to August 31.

Mitigation Measure BIO-4b: (Preconstruction Surveys). If Phase 2 construction, future recovery well development, or operations and maintenance activities involving ground disturbance and/or vegetation removal must occur between February 1 and August 31, then within 10 days prior to the start of work, a qualified biologist will conduct preconstruction surveys for active bird nests on and within 500 feet of the work area(s) in question.

Mitigation Measure BIO-4c: (Avoidance). Should any active nests be identified, the biologist will establish suitable disturbance-free buffers around the nests. Buffers will be identified on the ground with flagging or fencing, and will be maintained until the biologist has determined that the young have fledged and the nests are no longer active.

Compliance with the above mitigation measures would reduce impacts to nesting birds and raptors, including the state-threatened tricolored blackbird, to a less than significant level under CEQA and ensure compliance with state and federal laws protecting these species.

Implementation of Mitigation Measures BIO-1a, BIO-1b, BIO-1c, BIO-1d, BIO-1e, BIO-2a, BIO-2b, BIO-2c, BIO-3a, BIO-3b, BIO-3c, BIO-4a, BIO-4b, and BIO-4c will ensure that impacts to species identified as a candidate, sensitive, or special status will be *less than significant with mitigation incorporation*.

b) Would the project have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or US Fish and Wildlife Service?

No Impact: Designated critical habitat, sensitive natural communities, and other sensitive habitats are absent from the project site and adjacent lands. The project will have *no impact* on such habitats.

c) Would the project have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through director removal, filling, hydrological interruption, or other means?

Less than Significant Impact: Proposed construction of an inlet into the Tule River Intertie may impact a small area on the upper bank of this waterway. The function and value of the waterway would not be substantially altered, and impacts are considered less than significant under CEQA. Moreover, because this waterway is unlikely to fall under the jurisdiction of the USACE or CDFW, no Section 404 permit or Streambed Alteration Agreement is likely to be required. The impact is *less than significant*.

d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?

No Impact: Wildlife movement corridors are routes that animals regularly and predictably follow during seasonal migration, dispersal from native ranges, daily travel within home ranges, and interpopulation movements. Movement corridors in California are typically associated with valleys, ridgelines, and rivers and creeks supporting riparian vegetation. The project site does not contain features likely to function as wildlife movement corridors. There is *no impact*.

e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?

No Impact: The proposed project appears to be consistent with the goals and policies of the Tulare County General Plan and would not conflict with any other local policies or ordinances protecting biological resources. There is *no impact*.

f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?

<u>No Impact</u>: The project is not subject to any Habitat Conservation Plans or Natural Community Conservation Plans. There is *no impact*.

Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less than Significant Impact	No Impact
a) Cause a substantial adverse change in the significance of a historical resource pursuant to Section 15064.5?				V
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?		V		
c) Disturb any human remains, including those interred outside of formal cemeteries?		V		

Environmental Setting

The history of early settlement in the Tulare County area focused primarily on farming and ranching. European settlement did not occur until the arrival into southern California of land-based expeditions originating from Spanish Mexico starting in the 1760s. European-American settlement of this region began in 1851 with the building of Fort Miller on the San Joaquin River. Unfortunately, hostility grew between American settlers and Native inhabitants, which initially prevented widespread settlement of the area. By the 1860s, such stresses between the two groups were reduced and settlers began to inhabit more regions.

In April, 1852, Tulare County was created, with the county seat initially located at Woodsville. In 1853 the county seat was removed to Fort Visalia, located in the area bounded by Oak, Center, Garden and Bridge streets. In 1872, the Southern Pacific Railroad founded the City of Tulare by beginning construction of the railroad within Tulare County, connecting the San Joaquin Valley with markets in the north and east. During this time, valley residents constructed a series of water conveyance systems (canals, dams, and ditches) across the valley. Ample water supplies and assured rail transport were very important for the new colonies making their living off of fruit, grain and dairy farming.

A Phase 1 Cultural Resources Assessment was conducted for the Project in July 2020 by Taylored Archaeology. The study included a cultural resources records search, native American outreach, and a pedestrian survey. The records search results indicated that there were four investigations that have been conducted within the Project area and there have been 10 investigations within a 0.5-mile radius of the Project area. No previously recorded resources were found to exist in the Project area, but there are six known resources within a 0.5-mile radius of the Project area. These consist of historic structures and buildings. No artifacts were identified during the pedestrian survey and no responses were received during Tribal outreach. The full Phase 1 Cultural Resources Assessment can be found in Appendix C.

Regulatory Setting

National Historic Preservation Act: The National Historic Preservation Act was adopted in 1966 to preserve historic and archeological sites in the United States. The Act created the National Register of Historic Places, the list of National Historic Landmarks, and the State Historic Preservation offices.

California Historic Register: The California Historic Register was developed as a program to identify, evaluate, register, and protect Historical Resources in California. California Historical Landmarks are sites, buildings, features, or events that are of statewide significance and have anthropological, cultural, military, political, architectural, economic, scientific, religious, experimental, or other value. In order for a resource to be designated as a historical landmark, it must meet the following criteria:

- The first, last, only, or most significant of its type in the state or within a large geographic region (Northern, Central, or Southern California).
- Associated with an individual or group having a profound influence on the history of California.
- A prototype of, or an outstanding example of, a period, style, architectural movement or construction or is one of the more notable works or the best surviving work in a region of a pioneer architect, designer or master builder.

Tulare County General Plan: The Environmental Resource Management element of the Tulare County General Plan includes the following Goal and Policies pertaining to cultural and historic resources:

Goal ERM-6: To manage and protect sites of cultural and archaeological importance for the benefit of present and future generations.

- Policy ERM-6.1. The County shall participate in and support efforts to identify its significant cultural and archaeological resources using appropriate State and Federal standards.
- Policy ERM-6.2. The County shall protect cultural and archaeological sites with demonstrated potential for placement on the National Register of Historic Places and/or inclusion in the California State Office of Historic Preservation's California Points of Interest and California Inventory of Historic Resources. Such sites may be of Statewide or local significance and have anthropological, cultural, military, political, architectural, economic, scientific, religious, or other values as determined by a qualified archaeological professional.
- Policy ERM-6.3. When planning any development or alteration of a site with identified cultural or archaeological resources, consideration should be given to ways of protecting the resources. Development can be permitted in these areas only after a site specific investigation has been conducted pursuant to CEQA to define the extent and value of resource, and mitigation measures proposed for any impacts the development may have on the resource.
- Policy ERM-6.4. If preservation of cultural resources is not feasible, every effort shall be made to mitigate impacts, including relocation of structures, adaptive reuse, preservation of facades, and thorough documentation and archival of records.
- Policy ERM-6.5. The County should support local, State, and national education programs on cultural and archaeological resources.
- Policy ERM-6.6. The County shall support public and private efforts to preserve, rehabilitate, and continue the use of historic structures, sites, and parks. Where applicable, preservation efforts shall conform to the current Secretary of the Interior's Standards for the Treatment of Historic Properties and Guidelines for Preserving, Rehabilitating, Restoring, and Reconstructing Historic Buildings.
- Policy ERM-6.7. The County should encourage the cooperation of property owners to treat cultural resources as assets rather than liabilities, and encourage public support for the preservation of these resources.

- Policy ERM-6.8. The County shall continue to solicit input from the local Native American communities in cases where development may result in disturbance to sites containing evidence of Native American activity and/or to sites of cultural importance.
- Policy ERM-6.9. The County shall, within its power, maintain confidentiality regarding the locations of archaeological sites in order to preserve and protect these resources from vandalism and the unauthorized removal of artifacts.
- Policy ERM-6.10. The County shall ensure all grading activities conform to the County's Grading Ordinance and California Code of Regulations, Title 20, § 2501 et. seq.

Discussion

a) Would the project cause a substantial adverse change in the significance of a historical resource pursuant to in Section 15064.5?

No Impact: The Phase 1 Cultural Resources Assessment (Appendix C) did not identify any historical resources within the project area. The proposed project would not have any impact on any historical resource pursuant to Section 15064.5. There is no *impact*.

b) Would the project cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?

Less Than Significant Impact with Mitigation: The Phase 1 Cultural Resources Assessment (Appendix C) did not identify any archaeological resources within the project area. Although no archeoloical resources were identified, the presence of archeological resources under the ground surface is possible. Implementation of Mitigation Measures CUL-1 and CUL-2 will ensure that potential impact will be *less than significant with mitigation* incorporation.

c) Would the project disturb any human remains, including those interred outside of formal cemeteries?

Less Than Significant Impact with Mitigation: There are no known human remains buried in the project vicinity. If human remains are unearthed during development, there is a potential for a significant impact. As such, implementation of Mitigation Measure CUL-2 will ensure that impacts remain *less than significant with mitigation* incorporation.

Mitigation Measures for Impacts to Cultural Resources:

Mitigation Measure CUL-1: In the event of accidental discovery of unidentified archaeological remains during development or ground-moving activities in the Project area, all work should be halted until a qualified archaeologist can identify the discovery and assess its significance.

Mitigation Measure CUL-2: If human remains are uncovered during construction, the Tulare County Coroner is to be notified to investigate the remains and arrange proper treatment and disposition. If the remains are identified on the basis of archaeological context, age, cultural associations, or biological traits to be those of a Native American, California Health and Safety Code 7050.5 and PRC 5097.98 require that the coroner notify the NAHC within 24 hours of discovery. The NAHC will then identify the Most Likely Descendent who will be afforded an opportunity to make recommendations regarding the treatment and disposition of the remains.

VI. ENERGY

Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less than Significant Impact	No Impact
a) Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?			V	
b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?				Ŋ

Environmental Setting

Southern California Edison (SCE) provides electricity services to the region. SCE serves approximately 15 million people throughout a 50,000 square-mile service area in central, coastal, and southern California. SCE supplies electricity to its customers through a variety of renewable and nonrenewable sources. The Table 3-6 below shows the proportion of each energy resource sold to California consumers by SCE in 2017 as compared to the statewide average.

Fuel Type		PG&E Power Mix	California Power Mix		
Coal		0%	4%		
Large H	ydroelectric	8%	15%		
Nat	ural Gas	20%	34%		
Nuclear		6%	9%		
Other (Oil/Petroleum Coke/Waste Heat)		0%	<1%		
Unspecified Sources of Power ¹		34%	9%		
	Biomass	0%	2%		
	Geothermal	8%	4%		
Fligible	Small Hydro	1%	3%		
Renewables	Solar	13%	10%		
	Wind	10%	10%		
	Total Eligible Renewable	32%	29%		
1. "Unspecified sources of power" means electricity from transactions that are not traceable					
to specific generation sources.					

Table 3-6. 2017 SCE and State average power resources; Source: California Energy Commission

SCE also offers Green Rate Options, which allow consumers to indirectly purchase up to 100% of their energy from renewable sources. To accomplish this, SCE purchases the renewable energy necessary to meet the needs of Green Rate participants from solar renewable developers.

Southern California Gas (SoCalGas) Company provides natural gas services to the project area, however natural gas will not be required to operate the proposed project.

Regulatory Setting

California Code of Regulations, Title 20: Title 20 of the California Code of Regulations establishes standards and requirements for appliance energy efficiency. The standards apply to a broad range of appliances sold in California.

California Code of Regulations, Title 24: Title 24 of the California Code of Regulations is a broad set of standards designed to address the energy efficiency of new and altered homes and commercial buildings. These standards regulate energy consumed for heating, cooling, ventilation, water heating, and lighting. Title 24 requirements are enforced locally by the City of Selma Building Department.

California Green Building Standards Code (CALGreen): CalGreen is a mandatory green building code that sets minimum environmental standards for new buildings. It includes standards for volatile organic compound (VOC) emitting materials, water conservation, and construction waste recycling

Tulare County Climate Action Plan: The Tulare County Climate Action Plan serves as a guiding document for to reduce greenhouse gas emissions and adapt to the potential effects of climate change. The Tulare County Climate Action Plan identifies water conservation, and in particular the expansion of groundwater recharge to capture runoff and water available during wet years, as a way to save energy.

Discussion

a) Would the project result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?

Less Than Significant Impact: During project construction there would be an increase in energy consumption related to worker trips and operation of construction equipment. This energy use would be limited to the greatest extent possible through compliance with local, state, and federal regulations and is justified by the project's benefit.

The proposed project, and energy use associated with the proposed project, is necessary for the region to be resilient to the impacts of climate change. The project site is located within the Tule River Basin Integrated Regional Water Management (IRWMP) planning area. The IRWMP identifies declining water supply as one of the region's most significant climate change vulnerabilities due to the region's dependence on a reliable water supply for agriculture. The region receives the vast majority of its surface water from snowmelt, which is becoming an increasingly unreliable resource as a result of climate change. The ability to store excess surface water during wet years for use during dry years is imperative to the region's success in achieving climate change resilience. The proposed project actively seeks to facilitate this goal through the construction of groundwater recharge basins. Additionally, the proposed project will increase groundwater levels, which will reduce the energy required to pump groundwater during dry years.

Although project construction and operation of water recovery wells during dry years would result in some energy consumption, it would not be considered a wasteful, inefficient, or unnecessary consumption of energy resources. The impact is *less than significant*.

b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?

No Impact: The proposed project will not conflict with or obstruct any state or local plans for renewable energy or energy efficiency. The project is consistent with the Tulare County Climate Action Plan, which seeks to increase groundwater recharge to reduce energy demands from excess pumping and water treatment. There is *no impact*

VII. GEOLOGY AND SOILS

Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less than Significant Impact	No Impact
a) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:				
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.				V
ii) Strong seismic ground shaking?				V
iii) Seismic-related ground failure, including liquefaction?				Ŋ
iv) Landslides?			\checkmark	
b) Result in substantial soil erosion or the loss of topsoil?			V	
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?		Ø		
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct and indirect risks to life or property?				V
e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?				V
f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?				

Environmental Setting

Geologic Stability and Seismic Activity

• Seismicity: Tulare County is considered to be a low to moderate earthquake hazard area. The San Andreas Fault is the longest and most significant fault zone in California and is approximately 40 miles west of the Tulare County Boundary. Owens Valley fault zone is the only active fault located within Tulare County. The 2018 Tulare County Multi-Jurisdictional Local Hazard Mitigation Plan identifies the project site as likely to experience low to moderate shaking from earthquakes.

Ground shaking can result in other geological impacts, including liquefaction, landslides, lateral spreading, subsidence, or collapse.

- Liquefaction: Liquefaction is a phenomenon whereby unconsolidated and/or near-saturated soils lose cohesion and are converted to a fluid state as a result of severe vibratory motion. The relatively rapid loss of soil shear strength during strong earthquake shaking results in temporary, fluid-like behavior of the soil, which can result in landslides and lateral spreading. No specific countywide assessment of liquefaction has been performed; however the 2018 Tulare County Multi-Jurisdictional Local Hazard Mitigation Plan identifies the risk of liquefaction within the county as low because the soil types in the area either too coarse or too high in clay content to be suitable for liquefaction.
- Landslides: Landslides refer to a wide variety of processes that result in the downward and outward movement of soil, rock, and vegetation under gravitational influence. Landslides can be caused by both natural and human-induced changes in slope stability and often accompany other natural hazard events, such as floods, wildfire, or earthquake. Eastern portions of the County are considered to be at a higher risk of landslides where steep slopes are present. The 2018 Tulare County Multi-Jurisdictional Local Hazard Mitigation Plan states that erosion and slumping of soils can also occur along bluffs along the Kaweah, Kern and Tule Rivers.
- **Subsidence**: Land Subsidence refers to the vertical sinking of land as a result of either manmade or natural underground voids. Subsidence has occurred throughout the Central Valley at differing rates since the 1920's as a result of groundwater, oil, and gas withdrawal. During drought years, Tulare County is prone to accelerated subsidence, with some areas sinking up to 28 feet.

Soils Involved in Project: The proposed project involves construction on two soil types. The properties of these soils are described briefly below:

- Exeter loam, 0 to 2 percent slopes: The Exeter series consists of moderately deep to a duripan, moderately well drained soils that formed in alluvium mainly from granitic sources. Exeter soils are found on alluvial fans and stream terraces. These soils have very slow to medium runoff and moderately slow permeability above the duripan and very slow permeability in the duripan.
- Flamen loam, 0 to 2 percent slopes: The Flamen series consists of deep to a duripan, moderately well drained soils that formed in alluvium derived mainly from granitic rocks. Flamen soils are found on stream terraces. These soils have low or moderate runoff and moderate permeability above the duripan and slow permeability in the duripan.



Regulatory Setting

California Building Code: The California Building Code contains general building design and construction requirements relating to fire and life safety, structural safety, and access compliance. CBC provisions provide minimum standards to safeguard life or limb, health, property and public welfare by regulating and controlling the design, construction, quality of materials, use and occupancy, location and maintenance of all buildings and structures and certain equipment.

Tulare County General Plan: The Health and Safety Element of the Tulare County General Plan identifies the following goals and policies related to geologic and seismic hazards.

Goal HS-2 To reduce the risk to life and property and governmental costs from seismic and geologic Hazards.

- HS-2.1 Continued Evaluation of Earthquake Risks. The County shall continue to evaluate areas to determine levels of earthquake risk.
- HS-2.2 Landslide Areas. The County shall not allow development on existing unconsolidated landslide debris.
- HS-2.3 Hillside Development. The County shall discourage construction and grading on slopes in excess of 30 percent.
- HS-2.4 Structure Siting. The County shall permit development on soils sensitive to seismic activity permitted only after adequate site analysis, including appropriate siting, design of structure, and foundation integrity.
- HS-2.5 Financial Assistance for Seismic Upgrades. The County shall request Federal and State financial assistance to implement corrective seismic safety measures required for existing County buildings and structures.
- HS-2.6 Seismic Standards for Dams. The County shall continue to address seismic standards of dam safety as promulgated by the State Division of Safety of Dams, as applicable to all new and existing structures.
- HS-2.7 Subsidence. The County shall confirm that development is not located in any known areas
 of active subsidence. If urban development may be located in such an area, a special safety study
 will be prepared and needed safety measures implemented. The County shall also request that
 developments provide evidence that its long-term use of ground water resources, where
 applicable, will not result in notable subsidence attributed to the new extraction of groundwater
 resources for use by the development.
- HS-2.8 Alquist-Priolo Act Compliance. The County shall not permit any structure for human occupancy to be placed within designated Earthquake Fault Zones (pursuant to and as determined by the Alquist-Priolo Earthquake Fault Zoning Act; Public Resource code, Chapter 7.5) unless the specific provision of the Act and Title 14 of the California Code of Regulations have been satisfied.

Discussion

- a) Would the project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:
 - i. Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.

No Impact: Although the project is located in an area of relatively low seismic activity, the project site could be affected by ground shaking from nearby faults. The potential for strong seismic ground shaking on the project site is not a significant environmental concern due to the infrequent seismic activity of the area and distance to the faults.

The project does not propose any components which could cause substantial adverse effects in the event of an earthquake and the project has no potential to indirectly or directly cause the rupture of an earthquake fault. Therefore, there is *no impact* related to the risk of loss, injury or death involving a rupture of a known earthquake fault.

ii. Strong seismic ground shaking?

No Impact: According to the Tulare County Multi-Jurisdictional Local Hazard Mitigation Plan, the project site is located in an area of relatively low seismic activity. The proposed project does not include any activities or components which could feasibly cause strong seismic ground shaking, either directly or indirectly. There is *no impact.*

iii. Seismic-related ground failure, including liquefaction?

No Impact: No specific countywide assessment of liquefaction has been performed; however the Tulare County Multi-Hazard Mitigation Plan identifies the risk of liquefaction within the county as low because the soil types are unsuitable for liquefaction. The area's low potential for seismic activity would further reduce the likelihood of liquefaction occurrence. There is *no impact*.

iv. Landslides?

Less than Significant Impact: While the majority of the project construction will take place on relatively flat land, some construction will take place in and around existing PID canals. The removal of vegetation and topsoil in sloped areas can increase risks associated with landslide, however these construction activities would be subject to best management practices required by SWPPP. These measures will protect bank stability and greatly limit risks associated with landslides as a result of project construction. The impact is *less than significant*.

b) Would the project result in substantial soil erosion or the loss of topsoil?

Less Than Significant Impact: A large amount of soil will be removed from the project site as part of groundwater recharge basin construction. Although these construction activities will result in a loss of topsoil, any soil erosion impacts would be temporary and subject to best management practices

required by SWPPP. These best management practices are developed to prevent significant impacts related to erosion from construction. Because impacts related to erosion would be temporary and limited to construction and required best management practices would prevent significant impacts related to erosion, the impact will remain less than significant.

c) Would the project be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?

Less than Significant Impact with Mitigation: Significant subsidence (sinking of the ground surface) has occurred along the FKC due to dewatering of silty and clayey formations by pumpage from wells. While the Project would cause a net gain of 10% to 30% of banked water to the aquifer, the potential impact of subsidence needs to be monitored. Subsidence is measured by comparing sequential measurements of land surface elevation at a location. This comparison is predicated on the assumption that the reference bench mark for computation of elevation is outside of the area within which subsidence would potentially occur. Recovery from Project wells will not commence until a Monitoring Committee and Friant Water Authority approved Subsidence Monitoring Program is in place and being implemented. Subsidence monitoring and reporting will be implemented as part of the Project's Monitoring and Operational Constraints Plan (MOCP). The MOCP will have provisions to constrain Project operations as necessary. Implementation of the MOCP will be used as a mitigation measure for potential impacts to subsidence. Therefore, there is a less than significant impact with mitigation incorporated.

Mitigation Measures for Impacts to Subsidence

Mitigation Measure GEO-1: The proposed project will comply with the Project's Monitoring and Operational Constraints Plan as detailed in Section 2.2 of this Initial Study. The MOCP includes the following subsidence monitoring and reporting procedures.

Subsidence Monitoring: Significant subsidence (sinking of the ground surface) has occurred along the FKC in areas to the south of the Project site near Deer Creek due to dewatering of silty and clayey formations by pumpage from wells. While significant subsidence has not occurred in this area and the Project would cause a net gain of 10% to 30% of banked water to the aquifer, the potential impact of subsidence needs to be monitored. Subsidence is measured by comparing sequential measurements of land surface elevation at a location. This comparison is predicated on the assumption that the reference bench mark for computation of elevation is outside of the area within which subsidence would potentially occur. Recovery from Project wells will not commence until a Monitoring Committee and Friant Water Authority approved Subsidence Monitoring Program is in place and being implemented. However, at a minimum, subsidence monitoring would include the following elements:

- *Base Station:* Reference of all elevation measurements to a base station approved by PID;
- *Perimeter Benchmarks:* Placement of permanent bench-marks in four directions on the perimeter of each Project property;
- *Recovery Well Benchmarks:* Placement of permanent measurement points on each Project recovery well;

- *Baseline Measurements:* Measurement of the elevations prior to commencement of banked water recovery operations; and
- Annual Measurements: Measurement of the elevations of each benchmark annually.

Benchmarks would be constructed and monitored using procedures approved by the California Board for Professional Engineers and Land Surveyors and using appropriate guidelines promulgated by the National Geodetic Survey and the California Spatial Reference Center.

Subsidence monitoring results will be reported to the Monitoring Committee and the Friant Water Authority at the frequency that they require in the Subsidence Monitoring Program that they have authorized. Annual subsidence monitoring reports would be submitted to the monitoring committee, the FWA and Reclamation.

Operational Constraints: Setton may make operational adjustments in response to data evaluations, complaints by third parties or recommendations from the Monitoring Committee. Specifically, Setton will be required to cease operation of Project recovery wells by the Monitoring Committee or the Friant Water Authority if either of those parties has determined that Project recovery wells are contributing to or causing subsidence in the vicinity of the Friant Kern Canal. Examples of other potential operational adjustments that may be imposed on Stetton by the Monitoring Committee may include, but are not limited to:

- Shifting the locations, schedules and rates at which recharge and recovery are being performed;
- Reimbursement for higher pumping costs;
- Well rehabilitation;
- Lowering a pump further down a well;
- Reimbursement for treatment costs;
- Installation of treatment systems;
- Providing an alternate water supply; and
- Installation of a new well

d) Would the project be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?

No Impact: Expansive soils contain large amounts of clay, which absorb water and cause the soil to increase in volume. Conversely, the soils associated with the proposed project site are granular, well-draining, and therefore have a limited ability to absorb water or exhibit expansive behavior. Because the soils associated with the project are not suitable for expansion, implementation of the project will pose no direct or indirect risk to life or property caused by expansive soils and there is *no impact*.

e) Would the project have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?

No Impact: Wastewater will not be generated as a result of project implementation and no septic tanks or alternative wastewater disposal systems are proposed. There is *no impact*.

f) Would the project directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?

Less Than Significant Impact with Mitigation: There are no unique geologic features and no known paleontological resources located within the project area. However, there is always the possibility that paleontological resources may existing below the ground surface. Implementation of Mitigation Measures CUL-1 and CUL-2, will ensure that any impacts resulting from project implementation remain *less than significant with mitigation incorporation*.

Would the project:	Potentially	Less Than	Less than	No
	Significant	Significant	Significant	Impact
	Impact	With	Impact	
		Mitigation		
		Incorporation		
 a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment. 			Σ	
a) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?				Ŋ

Environmental Setting

VIII.

Natural processes and human activities emit greenhouse gases. The presence of GHGs in the atmosphere affects the earth's temperature. Without the natural heat-trapping effect of GHGs, the earth's surface would be about 34°C cooler. However, emissions from human activities, such as electricity production and vehicle use, have elevated the concentration of these gases in the atmosphere beyond the level of naturally occurring concentrations.

The effect of greenhouse gasses on earth's temperature is equivalent to the way a greenhouse retains heat. Common GHGs include water vapor, carbon dioxide, methane, nitrous oxide, ozone, chlorofluorocarbons, hydro chlorofluorocarbons, and hydro fluorocarbons, per fluorocarbons, sulfur and hexafluoride. Some gases are more effective than others. The Global Warming Potential (GWP) has been calculated for each greenhouse gas to reflect how long it remains in the atmosphere, on average, and how strongly it absorbs energy. Gases with a higher GWP absorb more energy, per pound, than gases with a lower GWP, and thus contribute more to global warming. For example, one pound of methane is equivalent to twenty-one pounds of carbon dioxide.

GHGs as defined by AB 32 include the following gases: carbon dioxide, methane, nitrous oxide, hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride. GHGs as defined by AB 32 are summarized in Table 3-7. Each gas's effect on climate change depends on three main factors. The first being the quantity of these gases are in the atmosphere, followed by how long they stay in the atmosphere and finally how strongly they impact global temperatures.

Greenhouse Gas	Description and Physical Properties	Lifetime	GWP	Sources
Methane (CH4)	Is a flammable gas and is the main component of natural gas	12 years	21	Emitted during the production and transport of coal, natural gas, and oil. Methane emissions also result from livestock and other agricultural practices and by the decay of organic waste in municipal solid waste landfills.

Greenhouse Gas	Description and Physical Properties	Lifetime	GWP	Sources
Carbon dioxide (CO2)	An odorless, colorless, natural greenhouse gas.	30-95 years	1	Enters the atmosphere through burning fossil fuels (coal, natural gas and oil), solid waste, trees and wood products, and also as a result of certain chemical reactions (e.g., manufacture of cement). Carbon dioxide is removed from the atmosphere (or "sequestered") when it is absorbed by plants as part of the biological carbon cycle.
Chloro- fluorocarbons	Gases formed synthetically by replacing all hydrogen atoms in methane or ethane with chlorine and/or fluorine atoms. They are non-toxic nonflammable, insoluble and chemically unreactive in the troposphere (the level of air at the earth's surface).	55-140 years	3,800 to 8,100	Were synthesized in 1928 for use as refrigerants, aerosol propellants, and cleaning solvents. They destroy stratospheric ozone.
Hydro- fluorocarbons	A man-made greenhouse gas. It was developed to replace ozone-depleting gases found in a variety of appliances. Composed of a group of greenhouse gases containing carbon, chlorine an at least one hydrogen atom.	14 years	140 to 11,700	Powerful greenhouse gases that are emitted from a variety of industrial processes. Fluorinated gases are sometimes used as substitutes for stratospheric ozone-depleting substances. These gases are typically emitted in smaller quantities, but because they are potent greenhouse gases.
Nitrous oxide (N2O)	Commonly known as laughing gas, is a chemical compound with the formula N2O. It is an oxide of nitrogen. At room temperature, it is a colorless, non-flammable gas, with a slightly sweet odor and taste. It is used in surgery and dentistry for its anesthetic and analgesic effects.	120 years	310	Emitted during agricultural and industrial activities, as well as during combustion of fossil fuels and solid waste.
Pre- fluorocarbons	Has a stable molecular structure and only breaks down by ultraviolet rays about 60 kilometers above Earth's surface.	50,000 years	6,500 to 9,200	Two main sources of pre-fluorocarbons are primary aluminum production and semiconductor manufacturing.
Sulfur hexafluoride	An inorganic, odorless, colorless, and nontoxic nonflammable gas.	3,200 years	23,900	This gas is manmade and used for insulation in electric power transmission equipment, in the magnesium industry, in semiconductor manufacturing and as a tracer gas.

Table 3-7. Greenhouse Gasses; Source: EPA, Intergovernmental Panel on Climate Change

In regards to the quantity of these gases are in the atmosphere, we first must establish the amount of particular gas in the air, known as Concentration, or abundance, which are measured in parts per million, parts per billion and even parts per trillion. To put these measurements in more relatable terms, one part per million is equivalent to one drop of water diluted into about 13 gallons of water, roughly a full tank of gas in a compact car. Therefore, it can be assumed larger emission of greenhouse gases lead to a higher concentration in the atmosphere.

Each of the designated gases described above can reside in the atmosphere for different amounts of time, ranging from a few years to thousands of years. All of these gases remain in the atmosphere long enough to become well mixed, meaning that the amount that is measured in the atmosphere is roughly the same all over the world regardless of the source of the emission.

Regulatory Setting

AB 32: AB 32 set the 2020 greenhouse gas emissions reduction goal into law. It directed the California Air Resources Board to begin developing discrete early actions to reduce greenhouse gases while also preparing a scoping plan to identify how best to reach the 2020 limit. The reduction measures to meet the 2020 target are to be adopted by the start of 2011.

SB 1078, SB 107 and Executive Order S-14-08: SB 1078, SB 107, and Executive Order S-14-08 require California to generate 20% of its electricity from renewable energy by 2017. SB 107 then changes the 2017 deadline to 2010. Executive Order S-14-08 required that all retail sellers of electricity serve 33 percent of their load with renewable energy by 2020.

Tulare County Climate Action Plan: The Tulare County Climate Action Plan serves as a guiding document for to reduce greenhouse gas emissions and adapt to the potential effects of climate change. The Tulare County Climate Action Plan identifies water conservation, and in particular the expansion of groundwater recharge to capture runoff and water available during wet years, as a way to save energy.

Discussion

a) Would the project generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment.

Less Than Significant Impact: Greenhouse gas emissions for the construction and operation of the proposed project were modeled using the California Emissions Estimator Model (CalEEMod). The full CalEEMod report can be found in Appendix A.

Construction: Greenhouse gasses would be generated during construction from activities including site preparation, grading, trenching, and building construction. The CalEEMod Emissions report predicts that this project will create a maximum of 207.686 MT of CO2e emissions per year during construction. Because the SJVAPCD does not have numeric thresholds for assessing the significance of construction-related GHG emissions, predicted emissions from project construction were compared to SCAQMD thresholds for construction related GHG emissions. The SCAQMD currently has a threshold of 10,000 metric tons of CO2e per year for construction emissions amortized over a 30-year project lifetime. Because project construction would generate far less GHG emissions than this threshold, impacts related to GHG emissions during project construction would be less than significant.

Operation: The project's operational GHG emissions were calculated using CalEEMod. The U.S. Environmental Protection Agency published a rule for the mandatory reporting of greenhouse gases (GHG) from sources that in general emit 25,000 MT or more of CO2e per year. Implementation of the proposed project would result in some long-term GHG emissions due to PID employee trips necessary for long term maintenance (approximately 1 trip/day). The CalEEMod report estimates that the project will generate approximately 0.00095 MT of CO2e annually from these activities. Because this is well below the 25,000 MT threshold for greenhouse gas emissions, impacts related to GHG emissions during project operations would be considered less than significant.

GHG emissions related to construction and operation of the proposed project are below accepted thresholds of significance. Therefore, the impact is considered *less than significant*.

b) Would the project conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?

No Impact: The proposed project will comply with all Federal, State, and Local rules pertaining to the regulation of greenhouse gas emissions. In addition, the project will implement Best Performance Standards developed by the SJVAPCD. Projects implementing Best Performance Standards are determined to have a less than significant impact on global climate change. The project will not conflict with any plan, policy, or regulation developed to reduce GHG emissions. There is *no impact*.

IX. HAZARDS AND HAZARDOUS MATERIALS

Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less than Significant Impact	No Impact
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?			V	
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?				Ŋ
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?				V
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard or excessive noise to the public or the environment?				R
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?			Ø	
 f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan? 				Ŋ
g) Expose people or structures, either directly or indirectly, to significant risk of loss, injury or death involving wildland fires?				

Environmental Setting

The proposed project site is located approximately 0.79 miles from the nearest school (Rockford Elementary School), 15.5 miles from the nearest private airstrip (SCE San Joaquin Heliport), and 2.2 miles from the nearest public airport (Porterville Municipal Airport).

The Department of Toxic Substances Control's (DTSC's) Envirostor was used to identify any sites known to be associated with releases of hazardous materials or wastes within the project area. This research confirmed that the project would not be located on a site that is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5.


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Regulatory Setting

Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (42 U.S. Code [U.S.C.] §9601 et seq.). The Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA, or the Superfund Act) authorizes the President to respond to releases or threatened releases of hazardous substances into the environment.

Occupational Safety and Health Administration. The Occupational Safety and Health Administration (OSHA) sets and enforces Occupational Safety and Health Standards to assure safe working conditions. OSHA provides training, outreach, education, and compliance assistance to promote safe workplaces. The proposed Project would be subject to OSHA requirements during construction, operation, and maintenance.

Toxic Substances Control Act of 1976 (15 U.S.C. §2601 et seq.). The Toxic Substance Control Act was enacted by Congress in 1976 and authorizes the EPA to regulate any chemical substances determined to cause an unreasonable risk to public health or the environment.

Hazardous Waste Control Law, Title 26. The Hazardous Waste Control Law creates hazardous waste management program requirements. The law is implemented by regulations contained in Title 26 of the California Code of Regulations (CCR), which contains requirements for the following aspects of hazardous waste management:

- Identification and classification;
- Generation and transportation;
- Design and permitting of recycling, treatment, storage, and disposal facilities;
- Treatment standards;
- Operation of facilities and staff training; and
- Closure of facilities and liability requirements.

California Code of Regulations, Title 22, Chapter 11. Title 22 of the California Code of Regulations contains regulations for the identification and classification of hazardous wastes. The CCR defines a waste as hazardous if it has any of the following characteristics: ignitability, corrosivity, reactivity, and/or toxicity.

California Emergency Services Act. The California Emergency Services Act created a multi-agency emergency response plan for the state of California. The Act coordinates various agencies, including CalEPA, Caltrans, the California Highway Patrol, regional water quality control boards, air quality management districts, and county disaster response offices.

Hazardous Materials Release Response Plans and Inventory Law of 1985. Pursuant to the Hazardous Materials Release Response Plans and Inventory Law of 1985, local agencies are required to develop "area plans" for response to releases of hazardous materials and wastes. Tulare County maintains a Hazardous Material Incident Response Plan to coordinate emergency response agencies for incidents and requires the submittal of business plans by persons who handle hazardous materials.

Discussion

a) Would the project create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?

Less than Significant Impact: Project construction activities may involve the use and transport of hazardous materials. The use of such materials would be considered minimal and would not require these materials to be stored in bulk form. The project does not involve the use or storage of hazardous substances other than the small amounts of pesticides, fertilizers, and cleaning agents required for normal maintenance of structures and landscaping. The project must adhere to applicable zoning and fire regulations regarding the use and storage of any hazardous substances. Further, there is no evidence that the site has been used for underground storage of hazardous materials. Therefore, the proposed project will have less than significant impacts to hazardous materials.

b) Would the project create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?

No Impact: There is no reasonably foreseeable condition or incident involving the project that could result in release of hazardous materials into the environment. There are no impacts.

c) Would the project emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?

No Impact: The project is not located within ¼ mile of an existing or proposed school, and there is no reasonably foreseeable condition or incident involving the emission, handling, or disposal of hazardous materials, substances, or waste that would affect areas within ¼ miles of existing or proposed school sites. There is *no impact*.

d) Would the project be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?

No Impact: The project site is not listed as a hazardous materials site pursuant to Government Code Section 65962.5 and is not included on a list compiled by the Department of Toxic Substances Control. There would be *no impact.*

e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?

Less than Significant Impact: The project site is located within the Porterville Municipal Airport influence area. However, the project does not conflict with any land use limitations associated with its proximity to the airport. The project does not propose any residences or permanent on-site personnel, and so would not expose any people residing or working in the project area to long-term excessive noise levels. Individuals involved in construction of the project would be exposed noise as a result of the project's proximity to the airport, however these noise levels would be short term,

limited to construction, and would not exceed noise levels generated from construction equipment. The impact is *less than significant*.

f) Would the project impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?

No Impact: The County's design and environmental review procedures shall ensure compliance with emergency response and evacuation plans. In addition, the site plan will be reviewed by the Fire Department per standard City procedure to ensure consistency with emergency response and evacuation needs. Therefore, the proposed project would have *no impact* on emergency evacuation.

g) Would the project expose people or structures, either directly or indirectly, to significant risk of loss, injury or death involving wildland fires?

No Impact: The land surrounding the project site is developed with residential and agricultural uses and are not considered to be wildlands. Additionally, the 2017 Tulare County Multi-Jurisdictional Local Hazard Mitigation Plan finds that fire hazards within the within the vicinity of the proposed project site have low frequency, limited extent, limited magnitude, and low significance. The proposed project would not expose people or structures to significant risk of loss, injury or death involving wildland fires and there is *no impact*.

X. HYDROLOGY AND WATER QUALITY

Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less than Significant Impact	No Impact
a) Violate any water quality standards or waste discharge requirements or otherwise sustainably degrade surface or ground water quality?			V	
b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?			V	
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner, which would:			V	
(i) result in substantial erosion or siltation on- or off-site?			V	
(ii) substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite?				V
(iii) create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or				V
(iv) impede or redirect flood flows?				V
d) In flood hazard, tsunami, or seiche zones risk the release of pollutants due to project inundation?				Ø
 e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater movement plan? 				V

Environmental Setting

Hydrologic System: The proposed project site is located in the Tulare Lake Hydrologic Region, which covers 10.9 million acres south of the San Joaquin River. The proposed project site lies within the San Joaquin Valley Groundwater Basin. The San Joaquin Valley Groundwater Basin is divided into seven subbasins. The proposed project site is located within the Tule Subbasin. The Subbasin comprises an area of approximately 467,000 acres in Tulare County. It is bordered by the Kaweah Subbasin to the north, Kern Subbasin to the south, the Tulare Lake Subbasin to the west, and the Sierra Nevada Foothills to the east. Major rivers in the Subbasin include Deer Creek and the Tule River.

Groundwater: PID receives groundwater supplies from the Tule Sub-basin. Groundwater typically flows with the direction of the ground surface gradient, from east to west. The eastern area of the Basin contains unconfined aquifer that is deeper and has a higher specific yield, while the western portion of the Basin contains areas of both confined and unconfined aquifer.

Alluvial sediments are found within the Tule Sub-basin and are bounded on the east by the granite from the Sierra Nevada Mountains and bounded on the west by the Tulare Lake bed, which contains a layer of diatomaceous clay (E-Clay also known as the Corcoran Clay). The alluvium within the Basin is a heterogeneous mix of clay, silt, sand, and gravel. The proposed project is located in an area of loamy material with slow to moderate permeability.

Surface Waters: PID encompasses portions of the Elk Bayou, Lewis Creek, Lower Deer Creek, Lower Tule River, and Town of Poplar-Frontal Tulare Lake Bed HUC10 watersheds. The proposed project is located within the Lower Deer Creek HUC10 watershed and the Town of Popular-Frontal Tulare Lake Bed HUC10 watershed. The District has a maximum annual entitlement of 46,000 AF/Year with the U.S. Bureau of Reclamation via the Friant Division of the Central Valley Project and 10,000 AF/Year via the Tule River. Additional Friant supplies are commonly available during uncontrolled seasons.

Regulatory Setting

Clean Water Act: The Clean Water Act (CWA) is enforced by the U.S. EPA and was developed in 1972 to regulate discharges of pollutants into the waters of the United States. The Act made it unlawful to discharge any pollutant from a point source into navigable waters unless a National Pollution Discharge Elimination System (NPDES) Permit is obtained.

Central Valley RWQCB: The proposed project site is within the jurisdiction of the Central Valley Regional Water Quality Control Board (RWQCB). The Central Valley TWQCB requires a National Pollution Discharge Elimination System (NPDES) Permit and Stormwater Pollution Prevention Plan (SWPPP) for projects disturbing more than one acre of total land area. Because the project is greater than one acre, a NPDES Permit and SWPPP will be required.

Tulare County General Plan: The Tulare County General Plan identifies the following hydrologic resource goals and policies that are potentially applicable to the proposed project:

- PFS-2.1 Water Supply: The County shall work with agencies providing water service to ensure that there is an adequate quantity and quality of water for all uses, including water for fire protection, by, at a minimum, requiring a demonstration by the agency providing water service of sufficient and reliable water supplies and water management measures for proposed urban development
- HS-5.4 Multi-Purpose Flood Control Measures: The County shall encourage multipurpose flood control projects that incorporate recreation, resource conservation, preservation of natural riparian habitat, and scenic values of the County's streams, creeks, and lakes. Where appropriate, the County shall also encourage the use of flood and/or stormwater retention facilities for use as groundwater recharge facilities.
- WR-1.8 Groundwater Basin Management: The County shall take an active role in cooperating in the management of the County's groundwater resources.
- WR-2.4 Construction Site Sediment Control: The County shall continue to enforce provisions to control erosion and sediment from construction sites
- WR-3.1 Develop Additional Water Sources: The County shall encourage, support and, as warranted, require the identification and development of additional water sources through the expansion of water storage reservoirs, development of groundwater banking for recharge and infiltration, and promotion of water conservation programs, and support of other projects and programs that intend to increase the water resources available to the County and reduce the individual demands of urban and agricultural users.

- WR-3.6 Water Use Efficiency: The County shall support educational programs targeted at reducing water consumption and enhancing groundwater recharge.
- WR-3.10 Diversion of Surface Water: Diversions of surface water or runoff from precipitation should be prevented where such diversions may cause a reduction in water available for groundwater recharge.

Discussion

a) Would the project violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?

Less than Significant Impact: This project will not generate any wastewater or violate any waste discharge requirements. A Stormwater Pollution Prevention Plan (SWPPP) will be required for the project. A SWPPP identifies all potential sources of pollution that could affect stormwater discharge during construction and identifies best management practices (BMPs) related to stormwater runoff. The project will implement ongoing water quality monitoring, reporting, and constraint of operations if necessary, as detailed in the Monitoring and Operational Constraint Plan (Section 2.2). Implementation of the MOCP will further reduce the potential for impacts to water quality as a result of the proposed project. The impact is less than significant.

b) Would the project substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?

Less than Significant Impact: The purpose of the proposed project is to bank water that is periodically available above current needs from the Friant Division of the Central Valley Project (Friant) and the Tule River Intertie and to make that water available to lawful recipients during times when it is needed. Although the project would result in the extraction of banked water when needed, water recovery operations will be done in such a way as to prevent substantial groundwater depletion. The existing and proposed wells that will be used to recover banked water when needed will be located throughout the project site, rather than concentrated in one area. This will ensure that water levels are able to equalize so that no specific area is depleted. These wells would be operated on an as-needed basis.

The project proposes to construction and operate a groundwater banking project on approximately 50 acres within the PID boundary. This will support the District's groundwater recharge efforts and offset the project's impacts to groundwater supplies during dry years, ultimately reducing aquifer overdraft in PID.

The proposed project includes implementation of an MOCP (Section 2.2), which includes procedures to monitor impacts to neighboring wells, and if necessary, to adjust or constrain operations. This will further reduce the potential for impacts related to groundwater supplies or groundwater recharge. The impact is *less than significant*.

c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner, which would:

i. Result in substantial erosion or siltation on- or off-site?

Less than Significant Impact: The proposed project will divert water that is periodically available above current needs from the Friant Division of the Central Valley Project (Friant) and the Tule River Intertie. This would be considered an alteration in drainage pattern, however this would not result in substantial erosion or siltation on- or off-site. Water that is diverted into the basin will remain in the basins for groundwater recharge and no runoff out of the basins will occur. A Stormwater Pollution Prevention Plan (SWPPP) will implemented during project construction. SWPPPs include mandated erosion control measures, which are developed to prevent significant impacts related to erosion caused by runoff during construction. The impact is less than significant.

ii. Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite?

Less than Significant Impact: The proposed project will divert water that is periodically available above current needs from the Friant Division of the Central Valley Project (Friant) and the Tule River Intertie. This would be considered an alteration in drainage pattern, however this would not result in substantial surface runoff or contribute to flooding on- or off-site. Diverting water into the proposed recharge basin during wet years will reduce impacts related to flooding on properties downstream from the project site. There is the potential for runoff to occur during project construction, however implementation of required SWPPP BMPs will reduce any impacts related to stormwater runoff, including flooding, to less than significant levels. The project will have a *less than significant impact* on flooding on or off site.

iii. Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?

No Impact: The proposed project will not create or contribute runoff water and there would be no impacts to existing or planned stormwater drainage systems. All stormwater will remain onsite, as the basins will be constructed to retain water for groundwater recharge. Additionally, implementation of SWPPP BMPs will further reduce the potential for stormwater-related impacts to occur. No chemicals or surfactants will be used during project maintenance or operations, so there will be no ongoing discharge that could impact water quality. There is *no impact*.

iv. Impede or redirect flood flows?

No Impact: The proposed project will divert water that is periodically available above current needs from the Friant Division of the Central Valley Project (Friant) and the Tule River Intertie. While this would be considered a redirection of flows, it would not displace flood flows in a way that would cause flooding on or off site. There is *no impact*.

d) Would the project, in flood hazard, tsunami, or seiche zones, risk the release of pollutants due to project inundation?

No Impact: The proposed project site will not be used for storage of any chemicals or pollutants and there is no risk of the release of pollutants due to project inundation. There is *no impact*.

e) Would the project conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?

No Impact: The proposed project does not conflict or obstruct any water quality control plan or sustainable groundwater management plan. There is *no impact.*

Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less than Significant Impact	No Impact
a) Physically divide an established community?				$\mathbf{\nabla}$
b) Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?				V

The proposed project site is located within an unincorporated area of Tulare County, approximately 1 mile west of the City of Porterville. The site is within the Rural Valley Lands planning area (Valley Agriculture) and is zoned AE20. All properties adjacent to the project site are also designated as Valley Agriculture under the County General Plan and are zoned AE20.

Regulatory Setting

Tulare County General Plan: The proposed project site and surrounding properties are within the County's Rural Valley land use planning area and are designated as Valley Agriculture. This designation establishes areas for intensive agricultural activities on prime valley agricultural soils and other productive or potentially productive valley lands where commercial agricultural uses can exist without conflicting with other uses, or where conflicts can be mitigated. Uses typically allowed include irrigated crop production, orchards and vineyards; livestock; resource extraction activities and facilities that directly support agricultural operations, such as processing; and other necessary public utility and safety facilities. Allowable residential development includes one principal and one secondary dwelling unit per parcel for relative, caretaker/employee, or farm worker housing. This designation is located primarily outside UDBs on the valley floor. The RVLP generally applies to the central valley below the 600-foot elevation contour line outside the County's UDBs and HDBs. The following standards apply to all parcels designated as valley agriculture except those parcels deemed non-viable under Part 2, Chapter 1 of the Rural Valley Lands Plan.

- Minimum Parcel Size: 10-80 Acres
- Maximum Density: 1 dwelling unit per 10 acres One additional unit may be allowed for every 20 additional acres over the minimum parcel size
- Maximum Intensity: 0.02 FAR

The following goals and policies in the Tulare County General Plan are applicable to the project site's agricultural land use designation:

- AG-1.17 Agricultural Water Resources: The County shall seek to protect and enhance surface water and groundwater resources critical to agriculture
- LU-2.5 Agricultural Support Facilities: The County shall encourage beneficial reuse of existing or vacant agricultural support facilities for new businesses (including nonagricultural uses)

- HS-5.4 Multi-Purpose Flood Control Measures: The County shall encourage multipurpose flood control projects that incorporate recreation, resource conservation, preservation of natural riparian habitat, and scenic values of the County's streams, creeks, and lakes. Where appropriate, the County shall also encourage the use of flood and/or stormwater retention facilities for use as groundwater recharge facilities.
- WR-1.5 Expand Use of Reclaimed Wastewater: To augment groundwater supplies and to conserve potable water for domestic purposes, the

Tulare County Zoning Ordinance: The proposed project site and surrounding properties are zoned as AG-20, General Agricultural-20 District. This district is intended for intensive agricultural uses of land. This area should be reserved for commercial agricultural uses due to its high soil quality. The minimum parcel size in the AG-20 zoning district is 20 acres in size.





Discussion

a) Would the project physically divide an established community?

No Impact: The proposed project will not physically divide an established community. The proposed groundwater recharge basins would be used to supplement groundwater resources which would support agricultural production in the community. The proposed project would not intrude on public right of way or impede movement of people or animals. There will be *no impacts.*

b) Would the project cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?

No Impact: The proposed project is supported by the Tulare County General Plan goals and policies. The proposed groundwater recharge basin would be used to supplement groundwater resources which would support agricultural production in the community. The Tulare County General Plan states that agricultural support activities are permitted on lands designated for agricultural use, and that projects to promote groundwater recharge and flood control should be encouraged. The project does not conflict with any land use plans for the area, and there is *no impact*.

Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less than Significant Impact	No Impact
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?				V
 b) Result in the loss of availability of a locally - important mineral resource recovery site delineated on a local general plan, specific plan or other lands use plan? 				V

There are no mineral resource zones in Tulare County and there is no mineral extraction occurring on or adjacent to the proposed project site. Historical mines within the County include mineral deposits of tungsten, copper, gold, magnesium and lead, however most of these mines are now closed – leaving only 30 active mining claims.

Regulatory Setting

California State Surface Mining and Reclamation Act: The California State Surface Mining and Reclamation Act was adopted in 1975 to regulate surface mining to prevent adverse environmental impacts and to preserve the state's mineral resources. The Act is enforced by the California Department of Conservation's Division of Mine Reclamation.

Tulare County General Plan: The following mineral resource goals and policies in the Environmental Resource Management Element of the Tulare County General Plan are potentially applicable to the proposed project.

Goal ERM-2: To conserve protect and encourage the development of areas containing mineral deposits while considering values relating to water resources, air quality, agriculture, traffic, biotic, recreation, aesthetic enjoyment, and other public interest values.

- Policy ERM-2.1: The County will encourage the conservation of identified and/or potential mineral deposits, recognizing the need for identifying, permitting, and maintaining a 50 year supply of locally available PCC grade aggregate
- Policy ERM-2.2: The County will recognize as a part of the General Plan those areas of identified and/or potential mineral deposits
- Policy ERM-2.3: The County will provide for the conservation of identified and/or potential mineral deposits within Tulare County as areas for future resource development. Recognize that mineral deposits are significantly limited within Tulare County and that they play an important role in support of the economy of the County
- Policy ERM-2.9: The County will encourage the development of mineral deposits in a manner compatible with surrounding land uses

- Policy ERM-2.10: Proposed incompatible land uses in the County shall not be on lands containing
 or adjacent to identified mineral deposits, or along key access roads, unless adequate mitigation
 measures are adopted or a statement of overriding considerations stating public benefits and
 overriding reasons for permitting the proposed use are adopted
- Policy ERM-2.13: All surface mines in the County, unless otherwise exempted, shall be subject to
 reclamation plans that meet SMARA requirements. Reclamation procedures shall restore the site
 for future beneficial use of the land consistent with the Tulare County General Plan, subsequent
 to the completion of surface mining activities. Mine reclamation costs shall be borne by the mine
 operator, and guaranteed by financial assurances set aside for restoration procedures

Goal ERM-3: To protect the current and future extraction of mineral resources that are important to the County's economy while minimizing impacts of this use on the public and the environment.

- Policy ERM-3.1: All mining operations in the County shall be required to take precautions to avoid contamination from wastes or incidents related to the storage and disposal of hazardous materials, or general operating activity at the site
- Policy ERM-3.2: Within the County UDBs and HDBs, new commercial mining operations should be limited due to environmental and compatibility concerns
- Policy ERM-3.3: The County shall allow by Special Use Permit small-scale oil and gas extraction activities and facilities that can be demonstrated to not have a significant adverse effect on surrounding or adjacent land and are within an established oil and gas field outside of a UDB
- Policy ERM-3.4: Facilities related to oil and gas extraction and processing in the County may be allowed in identified oil and gas fields subject to a special use permit. The extraction shall demonstrate that it will be compatible with surrounding land uses and land use designations
- Policy ERM-3.5: The County shall require the timely reclamation of oil and gas development sites upon termination of such activities to facilitate the conversion of the land to its primary land use as designated by the General Plan. Reclamation costs shall be borne by the mine operator, and guaranteed by financial assurances set aside for restoration procedures

Discussion

a) Would the project result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?

No Impact: The project site has no known mineral resources that would be of a value to the region and the residents of the state, therefore the proposed project would not result in the loss of or impede the mining of regionally or locally important mineral resources. There is *no impact*.

b) Would the project result in the loss of availability of a locally - important mineral resource recovery site delineated on a local general plan, specific plan or other lands use plan?

<u>No Impact</u>: There are no known mineral resources of importance to the region and the project site is not designated under the County's General Plan as an important mineral resource recovery site. For that reason, the proposed project would not result in the loss of availability of known regionally or locally important mineral resources. There is *no impact*.

Would the project result in:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less than Significant Impact	No Impact
a) Generation of a substantial temporary or permeant increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?			Ŋ	
 b) Generation of excessive ground-borne vibration or groundborne noise levels? 				V
c) For a project located within the vicinity of a private airstrip or, an airport land use plan or, where such a plan has not been adopted, within two miles of public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?			V	

Noise is often described as unwanted sound. Sound is the variation in air pressure that the human ear can detect. If the pressure variations occur at least 20 times per second, they can be detected by the human ear. The number of pressure variations per second is called the frequency of sound, and is expressed as cycles per second, called Hertz (Hz).

Ambient noise is the "background" noise of an environment. Ambient noise levels on the proposed project site are primarily due to agricultural activities and traffic. Construction activities usually result in an increase in sound above ambient noise levels.

Regulatory Setting

Tulare County General Plan: The Health and Safety Element of the Tulare County General Plan is responsible for establishing noise standards within the county and includes the following goals and policies related to noise that may be applicable to the project.

- HS-8.11 Peak Noise Generators: The County shall limit noise generating activities, such as construction, to hours of normal business operation (7 a.m. to 7 p.m.). No peak noise generating activities shall be allowed to occur outside of normal business hours without County approval.
- HS-8.18 Construction Noise: The County shall seek to limit the potential noise impacts of construction activities by limiting construction activities to the hours of 7 am to 7pm, Monday through Saturday when construction activities are located near sensitive receptors. No construction shall occur on Sundays or national holidays without a permit from the County to minimize noise impacts associated with development near sensitive receptors.

• HS-8.19 Construction Noise Control: The County shall ensure that construction contractors implement best practices guidelines (i.e. berms, screens, etc.) as appropriate and feasible to reduce construction-related noise impacts on surrounding land uses.

Discussion

a) Would the project result in generation of a substantial temporary or permeant increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?

Less than Significant Impact: Several residences are located directly west of the proposed project site and are the nearest sensitive receptors. Project construction is anticipated to last approximately 6 months and will involve temporary noise sources. The average noise levels generated by construction equipment that will be used in the proposed project are shown below.

Type of Equipment	dBA at 50 feet
Tractors	84
Loaders	85
Backhoes	80
Scrapers	89
Graders	85
Trenchers	80
Welders	74

Table 3-8. Noise levels of noise-generating construction equipment.Source: Federal Highway Administration Construction Noise Handbook.

The Tulare County General Plan and Tulare County Noise Control Ordinance do not identify noise thresholds for noise sources related to construction, however the General Plan does limit noise generating activities related to construction to daytime hours. The project will comply with these regulations and construction will only occur between 7:00 AM and 7:00 PM.

Long term noise levels would be minimal and limited to noise generated during maintenance and operational tasks, including site visits, pump and canal maintenance, and operation of the proposed pumps. There will be no permanent personnel on-site or continuous operation of noise-generating equipment. As stated in the General Plan, the normally acceptable noise thresholds for agricultural land use areas is 75 dB. Long term noise levels will not exceed this threshold.

Because noise generated during project operations will not exceed noise thresholds established by the Tulare County General Plan for Agricultural uses, and the project will comply with all regulations regarding construction hours, implementation of the proposed project will not expose persons to noise levels exceeding established standards and there is *no impact*.

b) Would the project result in generation of excessive ground-borne vibration or groundborne noise levels?

No Impact: The proposed project will not involve vibration-intensive construction activities, such as the use of pile drivers, jack hammers, or vibratory rollers. There is *no impact*.

c) For a project located within the vicinity of a private airstrip or, an airport land use plan or, where such a plan has not been adopted, within two miles of public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?

Less than Significant Impact: The project site is located within the Porterville Municipal Airport influence area. However, the project does not conflict with any land use limitations associated with its proximity to the airport. The project does not propose any residences or permanent on site personnel, and so would not expose any people residing or working in the project area to long-term excessive noise levels. Individuals involved in construction of the project would be exposed noise as a result of the project's proximity to the airport, however these noise levels would be short term, limited to construction, and would not exceed noise levels generated from construction equipment. The impact is *less than significant*.

Would the project:	Potentially Significant Impact	Less than Significant With Mitigation Incorporation	Less than Significant Impact	No Impact
a) Induce substantial unplanned population growth in an area, either directly (for example, by new homes and businesses) or directly (for example, through extension of roads or other infrastructure)?				R
b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?				Ŋ

The United States Census Bureau estimated the population in Tulare County to be 459,863 in 2015. This is an increase from the 2010 census, which counted the population in Tulare County to be 443,081. Factors that influence population growth include job availability, housing availability, and the capacity of existing infrastructure.

Regulatory Setting

The Tulare County population size is controlled by the development code and Land Use Element of the General Plan. These documents regulate the number of dwelling units per acre allowed on various land uses and establish minimum and maximum lot sizes. These factors have a direct impact on the County's population size.

Discussion

a) Would the project induce substantial unplanned population growth in an area, either directly (for example, by new homes and businesses) or directly (for example, through extension of roads or other infrastructure)?

No Impact: Construction and operation of the proposed project would not result in any population growth within Tulare County. Project operations would not require any long term, on-site employees and maintenance activities would be conducted by existing PID Employees. The project would not create any long-term employment opportunities that would lead to population growth. There is no impact.

b) Would the project displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?

No Impact: The proposed project would not require the removal of any existing people or housing structures and no housing or persons would be displaced. There is *no impact.*

 Would the Project: a) Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable serve ratios, response times of other performance objectives for any of the public services: 	Potentially Significant Impact	Less than Significant With Mitigation Incorporation	Less than Significant Impact	No Impact
a. Fire protection?				\mathbf{N}
b. Police protection?				\checkmark
c. Schools?				\checkmark
d. Parks?				\checkmark
e. Other public facilities?				$\mathbf{\nabla}$

Fire: The project site is served by the Tulare County Fire Protection Department which operates 27 fire stations within unincorporated areas of the County. The Tulare County Fire Protection Department is headquartered in Farmersville, CA. The FCFPD responds to over 12,000 calls annually.

Police: Law enforcement services are provided to the project site via the Tulare County Sheriff's Department. Tulare County will continue to provide police protection services to the proposed project site upon development. The nearest Tulare County Sheriff's Office is located in Porterville, approximately 5 miles east of the proposed project site.

Schools: The proposed project site is located within Rockford Elementary School District. The nearest school, Rockford Elementary School, is located 0.79 miles from the project site.

Regulatory Setting

School Districts in the Tulare County are regulated by the California Department of Education, and the Tulare Police Department is regulated by the California Department of Justice. Objectives and Policies relating to Law Enforcement, Fire Protection, Parkland, and School Facilities are included in the Land Use Element and Conservation and Open Space Element of the Tulare's General Plan. The Goals and Policies potentially applicable to the proposed project are as follows:

• COS-P4.1 Parkland/Open Space Standards: The City's goal is to provide 4 acres of developed parkland per 1,000 residents. New residential or mixed use developments containing a residential component may be required to provide parkland, or pay in-lieu fees, in this ratio as directed by the City.

- LU-P11.3 System Expansion: The City shall require new development be responsible for expansion of existing facilities such as water systems, sewer systems, storm drainage systems, parks, and other capital facilities made necessary to serve the new development.
- LU-P11.9: Adequate City Service Capacity: The City shall only approve new development when it can be demonstrated by the applicant that adequate public service capacity in the area is or will be available to handle increases related to the project. School capacity will be discussed in the review of each development, and the City will ensure early coordination with the school districts serving the site. School capacity will be addressed as allowed under State law.
- LU-P11.26 Evaluate Fiscal Impacts: The City shall evaluate the fiscal impacts of new development and encourage a pattern of development that allows the City to provide and maintain a high level of urban services (including, but not limited to, water, sewer, transportation, fire stations, police stations, libraries, administrative, and parks), and community facilities and utility infrastructure, as well as attract targeted businesses and a stable labor force.

Discussion

a) Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable serve ratios, response times of other performance objectives for any of the public services:

a. Fire protection?

No Impact: No Impact: Implementation of the proposed project will not result in increased demand for fire protection services. There is no impact.

b. Police protection?

No Impact: Implementation of the proposed project will not result in increased demand for fire protection services. There is no impact

c. Schools?

No Impact: The proposed project does not include any residential developments and would not result in any permanent, on-site employees. The project will not result in additional residents to Tulare County, and will not increase the number of students in the school district. Therefore, there is no impact.

d. Parks?

No Impact: Because the project will not result in additional residents, the project will not create need for additional parkland. Therefore, there is no impact.

e. Other public facilities?

No Impact: The proposed project will not result in addition residents or create additional jobs. The project will not create or increase demand for any public services. There is *no impact.*

Would the project:	Potentially Significant Impact	Less than Significant With Mitigation Incorporation	Less than Significant Impact	No Impact
a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?				Z
b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?				V

There are 13 parks that are owned and operated by Tulare County. Veterans Park is the nearest recreational area to the project site and is located approximately 3.5 miles northeast of the project site within the City of Porterville.

Regulatory Setting

Tulare County General Plan: The Environmental Resources Management Element of the Tulare County General Plan contains the following recreational resource goals and policies potentially applicable to the project.

- ERM-5.3 Park Dedication Requirements: The County shall require the dedication of land and/or payment of fees, in accordance with local authority and State law (for example the Quimby Act), to ensure funding for the acquisition and development of public recreation facilities.
- ERM-5.7 Public Water Access: The County shall give a high priority to the acquisition of public access rights to water courses. Acquisition of multi-purpose sites, such as the protection of drainage ways, wildlife habitats, and scenic assets, shall be encouraged. In the lakefront areas of Lake Success and Lake Kaweah, special consideration should be given to matching recreational needs of the community with lake access.
- ERM-5.8 Watercourse Development: The County, in approving recreational facilities along major watercourses, shall require a buffer of at least 100 feet from the high-water line edge/bank and screening vegetation as necessary to address land use compatibility issues. The establishment of a buffer may not be required when mitigated or may not apply to industrial uses that do not impact adjoining uses identified herein.

a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?

No Impact: The proposed project does not include any residential developments and would not result in any permanent, on-site employees resulting in additional residents to Tulare County. Because the project will not result in an increased population in Tulare County, the project will not increase the use of existing parkland or create need for additional parkland. There is no impact.

b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?

No Impact: There are no parkland or recreational facilities associated with the project. The project will not result in additional residents and the project will not create need for additional parkland. Therefore, there is no impact.

XVII. TRANSPORTATION

Would the project:	Potentially Significant Impact	Less than Significant With Mitigation Incorporation	Less than Significant Impact	No Impact
 a) Conflict with a program plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities? 				V
b) Conflict or be inconsistent with the CEQA guidelines Section 15064.3, Subdivision (B)?				Q
c) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?				Ŋ
d) Result in inadequate emergency access?				V

Environmental Setting

Vehicular Access: Vehicular access to the project will be available via Avenue 136, Avenue 144, and Rockford Road. A network of unpaved, private roads on the property provides full access to the project site.

Parking: No new or additional parking spaces are proposed for the project. The project will not require any permanent, on-site employees during project operations. During construction, workers will utilize existing facility parking areas and/or temporary construction staging areas for parking of vehicles and equipment.

Regulatory Setting

SB 743: SB 743 was signed by Governor Brown in 2013 and requires OPR to amend the CEQA Guidelines to provide an alternative to LOS for evaluating transportation impacts. The primary goals of SB 743 are:

- a) Combat climate change by reducing greenhouse gas emissions and particulates.
- b) Encourage infill development and a diversity of uses instead of sprawl; and
- c) Promote multi-modal transportation networks, providing clean, efficient access to destinations and improving public health through active transportation.

Guidelines Section 15064.3(b): CEQA Guidelines Section 15064.3 establishes vehicle miles traveled (VMT) as the metric to evaluate transportation impacts under CEQA, and states that automobile delay shall not constitute a significant environmental impact.

Tulare County Improvement Standards: The Tulare County Improvement Standards are developed and enforced by the Tulare County Public Works Department to guide the development and maintenance of County Roads. The cross section drawings contained in the County Improvement Standards dictate the development of roads within the county.

Tulare County General Plan: The County assesses the acceptability of roadways using Level of Service (LOS). The County has an LOS threshold of "D" for County roads.

Discussion

a) Would the project conflict with a program plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?

No Impact: The proposed project will involve the construction and operation of a groundwater banking project on approximately 50 acres. The project will not require any changes to existing transportation systems and will have no impact on any plans, ordinances, or policies related to the effectiveness or performance of the circulation system. There would *no impact*.

b) Would the project conflict or be inconsistent with CEQA Guidelines Section 15064.3, Subdivision (b)?

<u>No Impact</u>: CEQA Guidelines Section 15064.3, Subdivision (b) establishes vehicle miles traveled (VMT) as the metric to evaluate transportation impacts under CEQA. The CEQA Guidelines defines VMT as "the amount and distance of automobile travel attributable to a project" and states that the term "automobile" refers to on-road passenger vehicles, specifically cars and light trucks. Heavy-duty trucks are not included in this definition.

The Governor's Office of Planning and Research issued a Technical Advisory to assist in the implementation of these guidelines. The Technical Advisory provides methodology to screen projects assumed to be less than significant based on project size, type, and location. The Technical Advisory states that projects that would generate or attract fewer than 110 trips per day generally may be assumed to cause a less-than-significant transportation impact.

Trips to and from the project site would be limited to those necessary for maintenance activities (approximately 1 trip/day). The proposed project would not be a "destination" for the public and would not generate additional trips beyond those required for maintenance activities. Because the project would not generate a significant number of trips, the project's impact on VMT is presumed to be *less than significant*.

c) Would the project substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?

No Impact: No public roadway design features or incompatible uses are included in the proposed project. All equipment will remain on-site and outside of public Right of Way (R-O-W). There is *no impact.*

d) Would the project result in inadequate emergency access?

No Impact: The proposed project is located entirely outside the public R-O-W. All equipment will remain on-site and outside of public R-O-W. The project will have *no impact* on emergency access.

XVIII. TRIBAL CULTURAL RESOURCES

Would the project: Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less than Significant Impact	No Impact
a) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or		Ø		
b) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.		V		

Environmental Setting

Of the main groups inhabiting the Tulare County area, the Southern Valley Yokuts occupied the largest territory. The Yokuts numbered about 25,000, and were clustered into about fifty independent local sub-tribes. Historians believe approximately 22 villages stretched from Stockton northerly to the Tehachapi Mountains southerly, although most were concentrated around Tulare Lake, Kaweah River and its tributaries. As a result, numerous of cultural resource sites have been identified in Tulare County.

Phase 1 Cultural Resources Assessment: A Phase 1 Cultural Resources Assessment was conducted for the Project in July 2020 by Taylored Archaeology. The study included Native American Outreach, which involved sending an e-mail to the Native American Heritage Commission (NAHC) requesting a search of its Sacred Lands File and the contact information for local Native American tribal representatives who may have an interest in sharing information about the Project area and surrounding area.

In a June 17, 2020 response to Taylored Archaeology's request for information, the NAHC stated that a search of the Sacred Lands File did not indicate the presence of resources in the immediate Project area or surrounding 0.5-mile radius. The NAHC supplied a list of tribal representatives and recommended that Taylored Archaeology contact the following representatives for information regarding Native American cultural resources in the study locale:

- Secretary Julie Turner of Kern Valley Indian Community;
- Chairperson Robert Robinson of the Kern Valley Indian Community;
- Brandy Kendricks of the Kern Valley Indian Community;
- Chairperson Leo Sisco of the Santa Rosa Rancheria Tachi Yokut Tribe;
- Tribal Chairperson Robert L. Gomez, Jr. of the Tubatulabals of Kern Valley;

- Chairperson Neil Peyron of the Tule River Indian Tribe; and
- Chairperson Kenneth Woodrow of the Wuksache Indian Tribe/Eshom Valley Band.

On June 22, 2020, Consuelo Sauls sent a letter describing the Project to each of the individuals identified in the NAHC response letter. Follow-up contact by e-mail was completed on June 29, 2020 and telephone calls were placed on July 3, 2020 to confirm receipt of the letter and gather any information tribal representatives may want to share about resources in the Project area or general vicinity. No responses were received during this tribal outreach process and no artifacts were identified during a pedestrian survey of the project site. The full Phase 1 Cultural Resources Assessment can be found in Appendix C.

Definitions

- Historical Resources: Historical resources are defined by CEQA as resources that are listed in or eligible for the California Register of Historical Resources, resources that are listed in a local historical resource register, or resources that are otherwise determined to be historical under California Public Resources Code Section 21084.1 or California Code of Regulations Section 15064.5. Under these definitions Historical Resources can include archaeological resources, Tribal cultural resources, and Paleontological Resources.
- Archaeological Resources: As stated above, archaeological resources may be considered historical resources. If they do not meet the qualifications under the California Public Resources Code 21084.1 or California Code of Regulations Section 15064.5, they are instead determined to be "unique" as defined by the CEQA Statute Section 21083.2. A unique archaeological resource is an artifact, object, or site that: (1) contains information (for which there is a demonstrable public interest) needed to answer important scientific research questions; (2) has a special and particular quality, such as being the oldest of its type or the best available example of its type; or (3) is directly associated with a scientifically recognized important prehistoric or historic event or person.
- **Tribal Cultural Resource (TCR):** Tribal Cultural Resources can include site features, places, cultural landscapes, sacred places, or objects, which are of cultural value to a Tribe. It is either listed on or eligible for the CA Historic Register or a local historic register, or determined by the lead agency to be treated as TCR.
- Paleontological Resources: For the purposes of this section, "paleontological resources" refers to the fossilized plant and animal remains of prehistoric species. Paleontological Resources are a limited scientific and educational resource and are valued for the information they yield about the history of the earth and its ecology. Fossilized remains, such as bones, teeth, shells, and leaves, are found in geologic deposits (i.e., rock formations). Paleontological resources generally include the geologic formations and localities in which the fossils are collected.
- Native American Reserve (NAR): This designation recognizes tribal trust and reservation lands managed by a Native American Tribe under the United States Department of the Interior's Bureau of Indian Affairs over which the County has no land use jurisdiction. The County encourages adoption of tribal management plans for these areas that consider compatibility and impacts upon adjacent area facilities and plans.

National Historic Preservation Act: The National Historic Preservation Act was adopted in 1966 to preserve historic and archeological sites in the United States. The Act created the National Register of Historic Places, the list of National Historic Landmarks, and the State Historic Preservation offices.

California Historic Register: The California Historic Register was developed as a program to identify, evaluate, register, and protect Historical Resources in California. California Historical Landmarks are sites, buildings, features, or events that are of statewide significance and have anthropological, cultural, military, political, architectural, economic, scientific, religious, experimental, or other value. In order for a resource to be designated as a historical landmark, it must meet the following criteria:

- The first, last, only, or most significant of its type in the state or within a large geographic region (Northern, Central, or Southern California).
- Associated with an individual or group having a profound influence on the history of California.
- A prototype of, or an outstanding example of, a period, style, architectural movement or construction or is one of the more notable works or the best surviving work in a region of a pioneer architect, designer or master builder.

Tulare County General Plan: The Resource Land Use Designations of the 2035 Tulare County General Plan includes the following objective pertaining to cultural and historic resources:

Goal PF-6: To work with agencies, districts, utilities, and Native American tribes to promote consistency with the County's General Plan.

- Policy PF-6.1: Plans for Jurisdictions, Agencies, District, Utilities, and Native American Tribes The County shall work with Tulare County cities; adjacent counties and cities; Federal, State, and regional agencies; local districts; utility providers; Native American tribes; and the military to ensure that their plans are consistent with Tulare County's General Plan to the greatest extent possible.
- PF-6.2 Intergovernmental Coordination The County shall work with Federal, State, and regional agencies; local districts; utility providers; Native American tribes; and the military to ensure that the County and the public are involved, as appropriate, throughout any planning process and that agency and public input is requested

Goal ERM-6: To manage and protect sites of cultural and archaeological importance for the benefit of present and future generations.

• Policy ERM-6.8. The County shall continue to solicit input from the local Native American communities in cases where development may result in disturbance to sites containing evidence of Native American activity and/or to sites of cultural importance.

Discussion

Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:

a) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or

Less Than Significant Impact with Mitigation: Based on the results of the Phase 1 Cultural Resources Assessment and Tribal Outreach, no known tribal cultural resources are located within the project site. Although no tribal cultural resources resources were identified, the presence of remains or unanticipated tribal cultural resources under the ground surface is possible. Implementation of Mitigation Measures TCR-1, CUL-1, and CUL-2 will ensure that impacts to this checklist item will be *less than significant with mitigation* incorporation.

b) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.

Less Than Significant Impact with Mitigation: The lead agency has not determined there to be any known tribal cultural resources located within the project area. Additionally, there are not believed to be any paleontological resources or human remains buried within the project area's vicinity. However, if resources were found to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resources to a California Native American Tribe. Implementation of Mitigation Measures TCR-1, CUL-1, and CUL-2 will ensure that any impacts resulting from project implementation remain *less than significant with mitigation* incorporation.

Mitigation Measures for Impacts to Cultural Resources:

Mitigation Measure TCR-1: Upon coordination with the Tulare County Resource Management Agency, any archaeological artifacts recovered shall be donated to an appropriate Tribal custodian or a qualified scientific institution where they would be afforded long-term preservation. Documentation for the work shall be provided in accordance with applicable cultural resource laws and guidelines.

Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less than Significant Impact	No Impact
a) Require or result in the relocation or construction of new or expanded water, wastewater treatment or stormwater drainage, electric power, natural gas, or telecommunications facilities, the construction or relation of which could cause significant environmental effects?				Ŋ
b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?				V
c) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?				Ŋ
d) Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?				V
e) Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?				Ø

Wastewater: The proposed project does not include permanent restroom facilities or other wastewater sources. No additional wastewater treatment services will be required as a result of project implementation.

Solid Waste: Solid waste disposal will be provided by the Tulare County Solid Waste Department, which operates two landfills and six transfer stations within the county. Combined, these landfills receive approximately 300,000 tons of solid waste per day.

Water: Existing water entitlements currently provide water to the proposed project site. Implementation of the proposed project will not require additional water entitlements.

Regulatory Setting

CalRecycle: California Code of Regulations, Title 14, Natural Resources – Division 7 contains all current CalRecycle regulations regarding nonhazardous waste management in the state. These regulations include standards for the handling of solid waste, standards for the handling of compostable materials, design standards for disposal facilities, and disposal standards for specific types of waste.

Central Valley RWQCB: The Central Valley RWQCB requires a Stormwater Pollution Prevention Plan (SWPPP) for projects disturbing more than one acre of total land area. Because the project is greater than one acre, a SWPPP to manage stormwater generated during project construction. will be required.

The Central Valley RWQCB regulates Wastewater Discharges to Land by establishing thresholds for discharged pollutants and implementing monitoring programs to evaluate program compliance. This program regulates approximately 1500 dischargers in the region.

The Central Valley RWQCB is also responsible for implementing the federal program, the National Pollutant Discharge Elimination System (NPDES). The NPDES Program is the federal permitting program that regulates discharges of pollutants to surface waters of the U.S. Under this program, a NPDES permit is required to discharge pollutants into Water's of the U.S. There are 350 permitted facilities within the Central Valley Region.

Discussion

a) Would the project require or result in the relocation or construction of new or expanded water, wastewater treatment or stormwater drainage, electric power, natural gas, or telecommunications facilities, the construction or relation of which could cause significant environmental effects?

No Impact: No permanent restroom facilities are proposed and no wastewater will be generated as a result of project implementation. There is no impact.

b) Would the project have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?

No Impact: The purpose of the water banking project is to ensure water availability for agricultural water users during normal, dry, and multiple dry years. The proposed project will not use water resources during project operations. It will store excess surface waters during wet years and provide that water to agricultural water users during dry years. There is *no impact*.

c) Would the project result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?

No Impact: No wastewater will be generated as a result of project implementation. There will be no change to facilities or operations at existing wastewater treatment facilities. There is *no impact*.

d) Would the project generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?

Less Than Significant Impact: Waste Management will be provided by the Tulare County Solid Waste Department. Very little solid waste is anticipated as a result of project implementation and the landfills have sufficient permitted capacity to accommodate the project's solid waste disposal needs. The proposed project would not generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals. There is *no impact*.

e) Would the project comply with federal, state, and local management and reduction statutes and regulations related to solid waste?

No Impact: This proposed project conforms to all applicable statutes and regulations related to solid waste disposal. The proposed project will comply with the adopted policies related to solid waste, and will comply with all applicable federal, state, and local statutes and regulations pertaining to disposal of solid waste, including recycling. Therefore, the proposed project would have no impact on solid waste regulations.

XX. WILDFIRE

If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less than Significant Impact	No Impact
a) Substantially impair an adopted emergency response plan or emergency evacuation plan?				V
 b) Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire? 				V
c) Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?				V
d) Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post- fire slope instability, or drainage changes?				V

Regulatory Setting

Definitions:

Fire hazard severity zones: geographical areas designated pursuant to California Public Resources Codes Sections 4201 through 4204 and classified as Very High, High, or Moderate in State Responsibility Areas or as Local Agency Very High Fire Hazard Severity Zones designated pursuant to California Government Code, Sections 51175 through 51189.

Tulare Unit Strategic Fire Plan Key Goals and Objectives:

- Support the implementation and maintenance of defensible space inspections around structures
- Analyze trends in fire cause and focus prevention and education efforts to modify behaviors and effect change to reduce ignitions within Tulare County
- Identify and evaluate wildland fire hazards and recognize assets at risk, collecting and analyzing data to determine fuel reduction project, and other projects.
- Assist landowners and local government in the evaluation of the need to retain and utilize features (e.g. roads, fire lines, water sources) developed during fire suppression efforts, taking into consideration those identified in previous planning efforts

Tulare County Disaster Preparedness Guide (2011): The Tulare County Preparedness Guide provides guidelines regarding disaster preparedness and evacuation planning for Tulare County residents.

Discussion

a) Would the project substantially impair an adopted emergency response plan or emergency evacuation plan?

No Impact: The project would not substantially impair an adopted emergency response plan or emergency evacuation plan including the Tulare Unit Strategic Fire Plan and the Tulare County Disaster Preparedness Guide. The proposed project is located entirely outside the public R-O-W. All equipment will remain on-site and outside of public R-O-W. The project will be reviewed by the County's Fire Chief to ensure the project does not impair emergency response or emergency evacuation. There is *no impact*.

b) Due to slope, prevailing winds, and other factors, would the project exacerbate wildfire risks, and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?

<u>No Impact</u>: The project is located on a flat area of land with little risk of fire. The Tulare County Multi-Jurisdictional Local Hazard Mitigation Plan does not identify the site as a fire hazard severity zone. The project would not exacerbate wildfire risks and expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of wildfire. There is *no impact*.

c) Would the project require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?

<u>No Impact</u>: The proposed project would not require the installation or maintenance of roads, fuel breaks, emergency water sources, power lines or other utilities that could exacerbate fire risk or result in temporary or ongoing impacts to the environment. There is *no impact*.

d) Would the project expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire instability, or drainage changes?

<u>No Impact</u>: The project site is located on land with flat topography. In the event of a wildfire on or near the project site, the proposed project would not expose people or structures to significant risks, including downslope or downstream flooding or landslides as a result of runoff, post-fire instability or drainage changes. There is *no impact*.

XXI. MANDATORY FINDINGS OF SIGNIFICANCE

Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less than Significant Impact	No Impact
b) Does the project have the potential substantially to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?		V		
 b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)? 			V	
c) Does the project have environmental effects, which will cause substantial adverse effects on human beings, either directly or indirectly?			V	

Discussion

a) Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below selfsustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?

Less Than Significant Impact with Mitigation Incorporation: This initial study/mitigated negative declaration found the project could have significant impacts on biological, historical, and Tribal cultural resources. However, implementation of the identified mitigation measures for each respective section would ensure that impacts are *less than significant with Mitigation Incorporation*.

b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?

Less Than Significant Impact: CEQA Guidelines Section 15064(i) states that a Lead Agency shall consider whether the cumulative impact of a project is significant and whether the effects of the

project are cumulatively considerable. The assessment of the significance of the cumulative effects of a project must, therefore, be conducted in connection with the effects of past projects, other current projects, and probable future projects. Due to the nature of the project and consistency with environmental policies, incremental contributions to impacts are considered less than cumulatively considerable. The proposed project would not contribute substantially to adverse cumulative conditions, or create any substantial indirect impacts (i.e., increase in population could lead to an increase need for housing, increase in traffic, air pollutants, etc). Impacts would be *less than significant*.

c) Does the project have environmental effects, which will cause substantial adverse effects on human beings, either directly or indirectly?

Less Than Significant Impact: The analyses of environmental issues contained in this Initial Study indicate that the project is not expected to have substantial impact on human beings, either directly or indirectly. Mitigation measures have been incorporated in the project design to reduce all potentially significant impacts to less than significant, which results in a *less than significant* impact to this checklist item.
3.6 MITIGATION MONITORING AND REPORTING PROGRAM

As required by Public Resources Code Section 21081.6, subd. (a)(1), a Mitigation Monitoring and Reporting Program (MMRP) has been prepared for the project in order to monitor the implementation of the mitigation measures that have been adopted for the project. This Mitigation Monitoring and Reporting Program (MMRP) has been created based upon the findings of the Initial Study for the Rainbow IX Water Bank Project proposed by PID.

The first column of the table identifies the mitigation measure. The second column names the party responsible for carrying out the required action. The third column, "Timing of Mitigation Measure" identifies the time the mitigation measure should be initiated. The fourth column, "Responsible Party for Monitoring," names the party ensuring that the mitigation measure is implemented. The last column will be used by the Irrigation District to ensure that the individual mitigation measures have been monitored.

Plan checking and verification of mitigation compliance shall be the responsibility of PID.

Mitigation Measure	Responsible Party for Implementation	Implementation Timing	Responsible Party for Monitoring	Verification
Mitigation Measure BIO-1a: (Preconstruction Surveys). Preconstruction surveys for the SJKF shall be conducted no less than 14 days and no more than 30 days prior to the start of Phase 2 construction, future recovery well development, and any operations and maintenance activities involving ground disturbance. Each survey is to cover the work area(s) in question and adjacent lands within 200 feet ("survey area"). For each survey, the primary objective will be to identify kit fox habitat features (e.g., potential dens and refugia) within the survey area and evaluate their use by kit foxes. If an active kit fox den is detected, the USFWS shall be contacted immediately to determine the best course of action. For any given project activity requiring preconstruction surveys, surveys will be repeated following any lapses in construction of 30 days or more.	Project Sponsor	Within 14-30 days prior to the start of construction	Porterville Irrigation District	
Mitigation Measure BIO-1b: (Avoidance). Should active kit fox dens be detected during preconstruction surveys, the Sacramento Field Office of the USFWS and the Fresno Field Office of CDFW will be notified. A disturbance-free buffer will be established around the burrows in consultation with the USFWS and CDFW, to be maintained until an agency-approved biologist has determined that the burrows have been abandoned.	Project Sponsor	Prior to the start of construction.	Porterville Irrigation District	

Mitigation Measure	Responsible Party for Implementation	Implementation Timing	Responsible Party for Monitoring	Verification
Mitigation Measure BIO-1c : (Minimization). During Phase 2 construction, future recovery well development, and operations and maintenance activities involving ground disturbance, the Construction and Ongoing Operational Requirements section of the Standardized Recommendations shall be fully implemented to minimize potential impacts on the SJKF.	Project Sponsor	Ongoing during construction.	Porterville Irrigation District	
Mitigation Measure BIO-1d: (Employee Education Program). An Employee Education Program shall be developed by a qualified biologist and presented by the applicant or their representative to any personnel or contractors that will be involved with Phase 2 construction, future recovery well development, and ground-disturbing operations and maintenance activities, prior to those individuals being allowed to perform work on site. The program will include a description of the SJKF and its habitat needs; a report of the occurrence of kit fox in the project vicinity; an explanation of the status of the species and its protection under the Endangered Species Act; and a list of the measures being taken to reduce impacts to the species during construction. Attendees will be provided a handout with all of the training information included on it.	Project Sponsor	Prior to the start of construction	Porterville Irrigation District	
Mitigation Measure BIO-1e: (Mortality Reporting). The Sacramento Field Office of the USFWS and the Fresno Field Office of CDFW will be notified in writing within three working days in case of the accidental death or injury to a San Joaquin kit fox during construction. Notification must include the date, time, location of the incident or of the finding of a dead or injured animal, and any other pertinent information.	Project Sponsor	Ongoing during construction	Porterville Irrigation District	
Mitigation Measure BIO-2a: (Take Avoidance Surveys). Take avoidance surveys for burrowing owls shall be conducted by a qualified biologist within 30 days prior to the start of Phase 2 construction, future recovery well development, and any operations and maintenance activities involving ground disturbance. The surveys will be conducted according to methods described in the Staff Report on Burrowing Owl Mitigation (CDFG 2012). Each survey is to cover the work area(s) in question and adjacent lands within 200 meters, where potential nesting or roosting habitat is present ("survey area").	Project Sponsor	Within 30 days prior to the start of construction	Porterville Irrigation District	

Mitigation Measure	Responsible Party for Implementation	Implementation Timing	Responsible Party for Monitoring	Verification
Mitigation Measure BIO-2b: (Avoidance of Nest Burrows). If construction or ground-disturbing operations and maintenance activities are to occur during the breeding season (February 1-August 31) and active nest burrows are identified within the survey area, a 200-meter disturbance-free buffer will be established around each burrow. The buffers will be enclosed with temporary fencing to prevent encroachment by construction equipment and workers. Buffers will remain in place for the duration of the breeding season, unless otherwise arranged with CDFW. After the breeding season, passive relocation of any remaining owls may take place as described below.	Project Sponsor	Ongoing during construction.	Porterville Irrigation District	
Mitigation Measure BIO-2c: (Avoidance or Passive Relocation of Resident Owls). During the non- breeding season (September 1-January 31), resident owls occupying burrows in work areas associated with Phase 2 construction, future recovery well development, or ground-disturbing operations and maintenance activities may either be avoided, or passively relocated to alternative habitat. If the applicant chooses to avoid active owl burrows within the work area during the non-breeding season, a 50- meter disturbance-free buffer will be established around these burrows. The buffers will be enclosed with temporary fencing, and will remain in place until a qualified biologist determines that the burrows are no longer active. If the applicant chooses to passively relocate owls during the non-breeding season, this activity will be conducted in accordance with a relocation plan prepared by a qualified biologist.	Project Sponsor	Prior to the start of construction	Porterville Irrigation District	
Mitigation Measure BIO-3a: (Construction Timing). If feasible, Phase 2 construction, future recovery well development, and ground-disturbing operations and maintenance activities will occur entirely outside the Swainson's hawk nesting season, typically defined as March 1-September 15.	Project Sponsor	Ongoing during construction.	Porterville Irrigation District	
Mitigation Measure BIO-3b : (Preconstruction Surveys). If Phase 2 construction, future recovery well development, or ground-disturbing operations and maintenance activities must occur between March 1 and September 15, then within 10 days prior to the start of work, a qualified biologist will conduct preconstruction surveys for Swainson's hawk nests on and within ½ mile of the work area(s) in question.	Project Sponsor	Within 10 days prior to the start of construction.	Porterville Irrigation District	
Mitigation Measure BIO-3c: (Avoidance). Should any active nests be identified, the biologist will establish a suitable disturbance-free buffer around the nest. This buffer will be identified on the ground with flagging or fencing, and will be maintained until the biologist has determined that the young have fledged.	Project Sponsor	Prior to the start of construction	Porterville Irrigation District	

Mitigation Measure	Responsible Party for Implementation	Implementation Timing	Responsible Party for Monitoring	Verification
Mitigation Measure BIO-4a: (Construction Timing). If feasible, Phase 2 construction, future recovery well development, and operations and maintenance activities involving ground disturbance and/or vegetation removal will take place entirely outside of the avian nesting season, typically defined as February 1 to August 31.	Project Sponsor	Ongoing during construction	Porterville Irrigation District	
Mitigation Measure BIO-4b: (Preconstruction Surveys). If Phase 2 construction, future recovery well development, or operations and maintenance activities involving ground disturbance and/or vegetation removal must occur between February 1 and August 31, then within 10 days prior to the start of work, a qualified biologist will conduct preconstruction surveys for active bird nests on and within 500 feet of the work area(s) in question.	Project Sponsor	Within 10 days prior to the start of construction	Porterville Irrigation District	
Mitigation Measure BIO-4c: (Avoidance). Should any active nests be identified, the biologist will establish suitable disturbance-free buffers around the nests. Buffers will be identified on the ground with flagging or fencing, and will be maintained until the biologist has determined that the young have fledged and the nests are no longer active.	Project Sponsor	Prior to the start of construction	Porterville Irrigation District	
Mitigation Measure CUL-1: In the event of accidental discovery of unidentified archaeological remains during development or ground-moving activities in the Project area, all work should be halted until a qualified archaeologist can identify the discovery and assess its significance.	Project Sponsor	Ongoing during construction	Porterville Irrigation District	
Mitigation Measure CUL-2 : If human remains are uncovered during construction, the Tulare County Coroner is to be notified to investigate the remains and arrange proper treatment and disposition. If the remains are identified on the basis of archaeological context, age, cultural associations, or biological traits to be those of a Native American, California Health and Safety Code 7050.5 and PRC 5097.98 require that the coroner notify the NAHC within 24 hours of discovery. The NAHC will then identify the Most Likely Descendent who will be afforded an opportunity to make recommendations regarding the treatment and disposition of the remains.	Project Sponsor	Ongoing during construction	Porterville Irrigation District	
 Mitigation Measure GEO-1: The proposed project will comply with the Project's Monitoring and Operational Constraints Plan as detailed in Section 2.2 of this Initial Study. The MOCP includes the following subsidence monitoring and reporting procedures. Subsidence Monitoring: Significant subsidence (sinking of the ground surface) has occurred along the FKC in areas to the south of the Project site near Deer Creek 	Project Sponsor	Ongoing during Project Operations	Porterville Irrigation District	

Mitigation Measure	Responsible Party for Implementation	Implementation Timing	Responsible Party for Monitoring	Verification
due to dewatering of silty and clayey formations by pumpage from wells. While significant subsidence has not occurred in this area and the Project would cause a net gain of 10% to 30% of banked water to the aquifer, the potential impact of subsidence needs to be monitored. Subsidence is measured by comparing sequential measurements of land surface elevation at a location. This comparison is predicated on the assumption that the reference bench mark for computation of elevation is outside of the area within which subsidence would potentially occur. Recovery from Project wells will not commence until a Monitoring Committee and Friant Water Authority approved Subsidence Monitoring Program is in place and being implemented. However, at a minimum, subsidence monitoring would include the following elements:				
 Base Station: Reference of all elevation measurements to a base station approved by PID; Perimeter Benchmarks: Placement of permanent bench-marks in four directions on the perimeter of each Project property; Recovery Well Benchmarks: Placement of permanent measurement points on each Project recovery well; Baseline Measurements: Measurement of the elevations prior to commencement of banked water recovery operations; and Annual Measurements: Measurement of the elevations of each benchmark annually. 				
Benchmarks would be constructed and monitored using procedures approved by the California Board for Professional Engineers and Land Surveyors and using appropriate guidelines promulgated by the National Geodetic Survey and the California Spatial Reference Center.				
Subsidence monitoring results will be reported to the Monitoring Committee and the Friant Water Authority at the frequency that they require in the Subsidence Monitoring Program that they have authorized. Annual subsidence monitoring reports would be submitted to the monitoring committee, the FWA and Reclamation.				
Operational Constraints: Setton may make operational adjustments in response to data evaluations, complaints by third parties or recommendations from the Monitoring Committee. Specifically, Setton will be required to cease operation of Project recovery wells by the Monitoring Committee or the Friant Water Authority if either of those parties has determined				

Mitigation Measure	Responsible Party for Implementation	Implementation Timing	Responsible Party for Monitoring	Verification
that Project recovery wells are contributing to or causing subsidence in the vicinity of the Friant Kern Canal. Examples of other potential operational adjustments that may be imposed on Stetton by the Monitoring Committee may include, but are not limited to:				
 Shifting the locations, schedules and rates at which recharge and recovery are being performed; Reimbursement for higher pumping costs; Well rehabilitation; Lowering a pump further down a well; Reimbursement for treatment costs; Installation of treatment systems; Providing an alternate water supply; and Installation of a new well 				
Mitigation Measure TCR-1: Upon coordination with the Tulare County Resource Management Agency, any archaeological artifacts recovered shall be donated to an appropriate Tribal custodian or a qualified scientific institution where they would be afforded long-term preservation. Documentation for the work shall be provided in accordance with applicable cultural resource laws and guidelines.	Project Sponsor	Ongoing during construction	Porterville Irrigation District	

- 1. AB 3098 List
- 2. Tulare County General Plan
- **3.** Tulare County General Plan EIR
- 4. Tulare County Climate Action Plan
- 5. Tulare County Zoning Ordinance
- **6.** Engineering Standards, Tulare County
- **7.** SJVAPCD Regulations and Guidelines
- 8. Flood Insurance Rate Maps
- 9. California Air Resources Board's (CARB's) Air Quality and Land Use Handbook
- **10.** 2008 California Environmental Quality Act CEQA Guidelines
- **11.** California Building Code
- **12.** California Stormwater Pollution Prevention Program (SWPPP)
- **13.** "Construction Noise Handbook." U.S. Department of Transportation/Federal Highway Administration.
- **14.** Government Code Section 65962.5
- **15.** California Environmental Protection Agency (CEPA)
- **16.** California Energy Efficiency Strategic Plan: New Residential Zero Net Energy Action Plan 2015-2020, June 2015
- **17.** San Joaquin Valley Air Pollution Control District Mitigation Measures (http://www.valleyair.org/transportation/Mitigation-Measures.pdf)
- 18. Porterville Irrigation District 2012 Agricultural Water Management Plan

Section 4

List of Preparers

Porterville Irrigation District

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SECTION 4 List of Preparers

Project Title: Rainbow IX Water Bank Project

List of Preparers

4-Creeks Inc.

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Persons and Agencies Consulted

The following individuals and agencies contributed to this Initial Study:

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• Consuelo Sauls, Archaeologist