ES. EXECUTIVE SUMMARY

ES.1. INTRODUCTION

This Programmatic Environmental Impact Report (PEIR) has been prepared by consultants on behalf of the Westlands Water District (District) as Lead Agency in conformance with the California Environmental Quality Act (CEQA) to inform the public, decision-makers, and other public agencies of the potentially significant environmental impacts associated with implementation of the proposed plan under consideration.

Valley Clean Infrastructure Plan (VCIP)

This PEIR assesses the potentially significant environmental effects related to adoption and long-term implementation of the proposed Valley Clean Infrastructure Plan (VCIP, Project, or Plan). The proposed VCIP would provide the policy and planning framework for the implementation of renewable energy projects within the Fresno County portion of the District's service area (Plan Area) that would be located on private and District-owned lands within identified Development Focus Areas (DFAs). Such projects would involve the long-term but temporary repurposing of farmlands within the DFAs for clean energy generation, storage, transmission, and other ancillary and supportive uses. AB 2661 (2024) authorizes the District's to advance these uses within the District's boundaries. AB 2661 recognizes the "unique need of the Westlands Water District to support the development of solar electrical generation for the electrical grid and to facilitate the development of transmission capacity to help California reach its clean energy and climate goals."

AB 2661 was approved on September 25, 2024, and is codified as Water Code sections 37860-37861. It specifically authorizes the District to: (1) provide, generate, and deliver solar photovoltaic electricity, and construct, operate, and maintain any and all works, facilities, improvements, and property, or portions thereof, necessary or convenient for generating and delivering that electricity; (2) construct, operate, and maintain an energy storage system, as defined in section 2835 of the Public Utilities Code, and all works, facilities, improvements, and property, or portions thereof, necessary or convenient for the operation of an energy storage system, within the boundaries of the District; and (3) construct, operate, and maintain electrical transmission lines and all works, facilities, improvements, and property, or portions thereof, necessary or convenient for the conveyance of electricity within the boundaries of the District. While unrelated to the CEQA process, AB 2661 also requires that the District establish a community benefits agreement plan for the VCIP and related projects, with specific benefits to include but not limited to: job creation and training programs for local residents, use of local businesses and vendors, and financial contributions to community development projects and programs (Wat. Code, section 37860(b)-(d)).

Sustainable Groundwater Management Act (SGMA)

In September 2014, Governor Brown signed the Sustainable Groundwater Management Act (SGMA). The goal of the legislation is to, among other things, provide for the "sustainable management" of California's groundwater basins (i.e., the management and use of groundwater in a manner that can be maintained during SGMA's planning and implementation horizon without causing specified "undesirable results") and to "enhance local management of groundwater." (Wat. Code, §§ 10720.1, 10721(v).) As the primary water purveyor in the Subbasin, the District is the designated Groundwater Sustainability Agency (GSA) for the Westside Subbasin (Subbasin). DWR has designated the Subbasin as a critically overdrafted basin. The District, in cooperation with Fresno County, prepared the "Westside Subbasin Groundwater Sustainability Plan" (the

GSP), which was adopted by both agencies in January 2020. The purpose of the GSP is to characterize groundwater conditions in the Subbasin, evaluate and report on conditions of overdraft, establish sustainability goals and sustainability management criteria, and describe projects and management actions the GSA intends to implement to achieve sustainability by 2040.

The 2025 Amendment to the GSP focuses on groundwater management actions that may be implemented by the GSA to achieve sustainability by 2040. GSP Project No. 6, "Agricultural Land Repurposing," identifies the proposed VCIP and the District's Strategic Plan as initiatives to promote groundwater sustainability in the Subbasin. The District's Strategic Plan outlines key strategies to ensure the District achieves long-term groundwater sustainability, preserves economic opportunities for growers and the communities, and protects against undesirable results, such as subsidence. Regarding the proposed VCIP, the GSP provides: "The VCIP is an initiative that focuses on expanding clean and renewable energy infrastructure within California's Central Valley. It aims to support the region's transition to more sustainable energy sources while addressing environmental and economic challenges. . . . The VCIP seeks to align energy development with goals of sustainability and resilience, including the reduction of carbon emissions and groundwater sustainability." Consistent with the VCIP's project description, the GSP further provides: "The District's objective with VCIP is to repurpose drainage-impaired and other agricultural lands for the generation of clean energy to promote enhanced agricultural productivity within the District." Overall, the GSP determined that these agricultural land repurposing programs would "enhance the long-term sustainability of groundwater resources by addressing both water use reduction and regional economic transition, ensuring groundwater sustainability, and fostering environmental and community resilience" (DWR 2025).

In furtherance of SGMA implementation for the Subbasin, this PEIR evaluates the potential physical environmental effects of renewable energy and infrastructure projects developed under the proposed VCIP as authorized by AB 2661.

ES.2. OVERVIEW OF THE VCIP

Consistent with the mission of the District to provide timely, reliable, and affordable water service to landowners and water users in western Fresno and Kings Counties, the proposed VCIP is intended to provide an overall plan to guide and facilitate beneficial temporary but long-term repurposing of private and District-owned lands within the proposed DFAs, through proposals by Golden State Clean Energy (GSCE) and any other potential project proponents to develop clean energy generation, storage, transmission, and other ancillary and supportive energy uses in a manner that furthers the District's mission.

The proposed VCIP is a regional non-regulatory master planning tool for the structure and major components of clean energy projects in the Plan Area, involving potential construction of transmission lines, generation tie lines, substations and related infrastructure for conveyance of clean energy, and the actual generation and storage of clean energy, subject to permits or land use entitlements issued by other public agencies with regulatory authority. For the District's planning purposes, the VCIP and its potential clean energy projects are subject to CEQA review as the "whole" of the proposed "action" in relation to decisions the District may make in evaluating and approving its own policy decisions and transactions, and to inform future permitting and regulatory proceedings.

The VCIP is intended to achieve a number of water supply and energy-related objectives (see Section 2.2), and includes two main elements:

1) Energy Resource Plan – This element identifies specific areas within the Plan Area (see Figure ES-1) that have been identified for potential renewable energy development, including solar photovoltaic (PV) facilities with integrated energy storage systems (ESS), along with typical supporting facilities such as Operations and Maintenance (O&M) facilities and project substations. Separate ESS facilities located outside of solar projects and dedicated solely to energy storage are also included in the Plan.

2) Infrastructure Plan – This element consists of the transmission facilities and collection substations required for the collection of solar generation within the Plan Area, and for the delivery of renewable energy to electricity markets in California. The energy produced at the solar facilities would be transferred to generation tie-lines (gen-tie lines) for conveyance to one of five new collection substations to be distributed throughout the Plan Area. The collection substations would provide for interconnection to the state and federal power systems for delivery of the solar generation outside the VCIP.

Plan Area Definition

The Plan Area for the VCIP encompasses the entire Fresno County portion of the District's service area. This area comprises a total of about 534,800 acres within the District's approximately 614,700-acre overall service area. Solar and infrastructure development within the Kings County portion of the District's service area is covered by the Westlands Solar Park Master Plan, which was adopted by the District's Board of Directors on January 16, 2018. No additional lands within the Kings County service area have been identified for potential clean energy development as part of the VCIP.

Development Focus Areas (DFAs)

Within the defined Plan Area, approximately 136,000 acres have been identified as DFAs. These lands, which are suitable for clean energy development, include the following: (1) approximately 72,000 acres of District-owned land; and (2) approximately 64,000 acres of privately-owned lands for which the landowners have expressed interest in clean energy facilities. The 136,000 gross acres in the DFAs would accommodate the contemplated generation capacity of up to 21,000 megawatts (MW) under the proposed VCIP. (This is based on the current average development intensity for PV solar of about 6.5 gross acres per MW, which includes solar PV generation and energy storage facilities, substations, and other ancillary facilities).

ES.3. PROJECT OBJECTIVES OF THE VCIP

The proposed VCIP is intended to fulfill the following overall goals of the project proponents: (1) the District's mission of water supply reliability/water service efficiency; and (2) state and GSCE goals for renewable energy, in addition to objectives related to water supply, energy, climate change, and economic development. The specific project objectives of each of the project proponents are set forth below.

Westlands Water District

- Utilize the District's location, topography, and excellent insolation (solar radiation energy) attributes to promote the siting of solar generation, storage, and transmission of renewable energy, in furtherance of federal, state, and local renewable energy and carbon reduction goals over approximately the next 35 years.

- Balance the promotion of long-term but temporary development of solar energy projects and associated storage and transmission facilities with the protection of environmental resources, which may include, among other things, protection of agricultural, biological, cultural, and water resources.

- Avoid or substantially reduce environmental impacts associated with solar development, construction, and operation through low-impact design, short construction timeline with minimal ground disturbance, low amounts of impervious surfaces, the continued use of existing habitat by present wildlife, co-location of energy and agricultural activities where practicable.

- Ensure financing of decommissioning and site reclamation at the end of the project life in order to restore the site to conditions suitable for agricultural use.

- Utilize existing facilities, roads, and other infrastructure to the extent feasible.

- Identify preferred transmission corridors to efficiently convey renewable energy from VCIP projects to the statewide electricity market and reduce dependence on, and environmental impacts such as wildfire risk associated with, long-distance transmission.

- Contribute to the solution of reduced water supply reliability by (i) providing productive long-term but temporary repurposing of those lands from irrigated agriculture and for renewable energy production, and (ii) ensuring irrigated agriculture on the repurposed lands can be restored following the decommissioning of the renewable energy projects, particularly with advancement of water conservation and irrigation technologies.

- Facilitate implementation of the Sustainable Groundwater Management Act (SGMA) by: (i) contributing to the conjunctive use of groundwater for irrigation; (ii) promoting drought resiliency, (iii) reducing the likelihood of undesirable results like subsidence, including in the vicinity of sections of the San Luis Canal/California Aqueduct, and (iv) implementing the VCIP pursuant to the Westside Subbasin Groundwater Sustainability Plan (GSP) in conjunction with other agricultural land repurposing management actions.

- Address the chronic shortage of CVP contract water deliveries by promoting repurposing of farmland and by facilitating the redirection of scarce surface water allocations to other productive agricultural land within the District.

- Provide utility-scale power generation on farmland that has been fallowed or removed from irrigated agriculture due to lack of a reliable surface water supply, which reduces pressure to develop renewable energy on prime agricultural land elsewhere. Promote expeditious and efficient repurposing of farmlands through a comprehensive planning process to address transmission capacity constraints on further incremental clean energy development in the District.

- Provide for development of utility-scale solar generation facilities on highly disturbed lands, which provide minimal habitat value for wildlife.

- Provide a low-impact alternative location for the siting of utility-scale renewable energy development that might otherwise occur on lands with high habitat value for protected wildlife species (such as the Mojave Desert).

- Contribute to overall reduction in greenhouse gas emissions by generating electricity that is not based on the combustion of fossil fuel.

- Positively contribute to the local economy through stimulation of economic activity such as creation of secondary multiplier employment and the purchase of materials and services.

- Provide community benefits through job creation and training programs for local residents, use of local businesses and vendors, financial contributions to community development projects and programs, and increased property tax and sales tax revenues.

Golden State Clean Energy

- Help implement the state's Global Warming Solutions Act of 2006 (AB 32), as supplemented in 2016 by SB 32, by facilitating the development of up to 21,000 MW of non-fossil fuel based sources of electricity that will replace existing fossil-based generation and thereby contribute to achieving the state's goal of carbon neutrality by 2045.

- Provide new sources of energy storage that support the state in achieving its renewable energy and carbon neutrality targets, and provide transmission facilities for conveying the renewable energy to the state's electrical load centers.
- Potentially provide the District with a direct source of renewable energy for operation of the District's Groundwater Management Program wells, filtration booster pumps, and other District owned facilities.
- Provide for utility-scale energy generation on disturbed lands which provide minimal habitat value for wildlife.
- Provide the foundation for a renewables development program which will generate an average of 6,000 construction jobs for at least 10 years, in addition to approximately 800 permanent jobs and approximately 400 part-time jobs upon the VCIP buildout.
- Promote local hiring by establishing a job creation and training program for local residents.
- Positively contribute to the local economy through stimulation of economic activity such as creation of secondary multiplier employment and local procurement of equipment, goods and services.

- Provide community benefits through increased property tax revenues and increased sales tax receipts through local procurement and establishment of local points of sale for materials sourced from outside the area.

ES.4. OVERVIEW OF THE VCIP COMPONENTS

The main components of the VCIP are summarized below. The conceptual plan for clean energy development and transmission infrastructure is shown in Figure ES-1. The various components of VCIP are described in greater detail Chapter *2. Project Description*.

ES.4.1. ENERGY RESOURCE PLAN

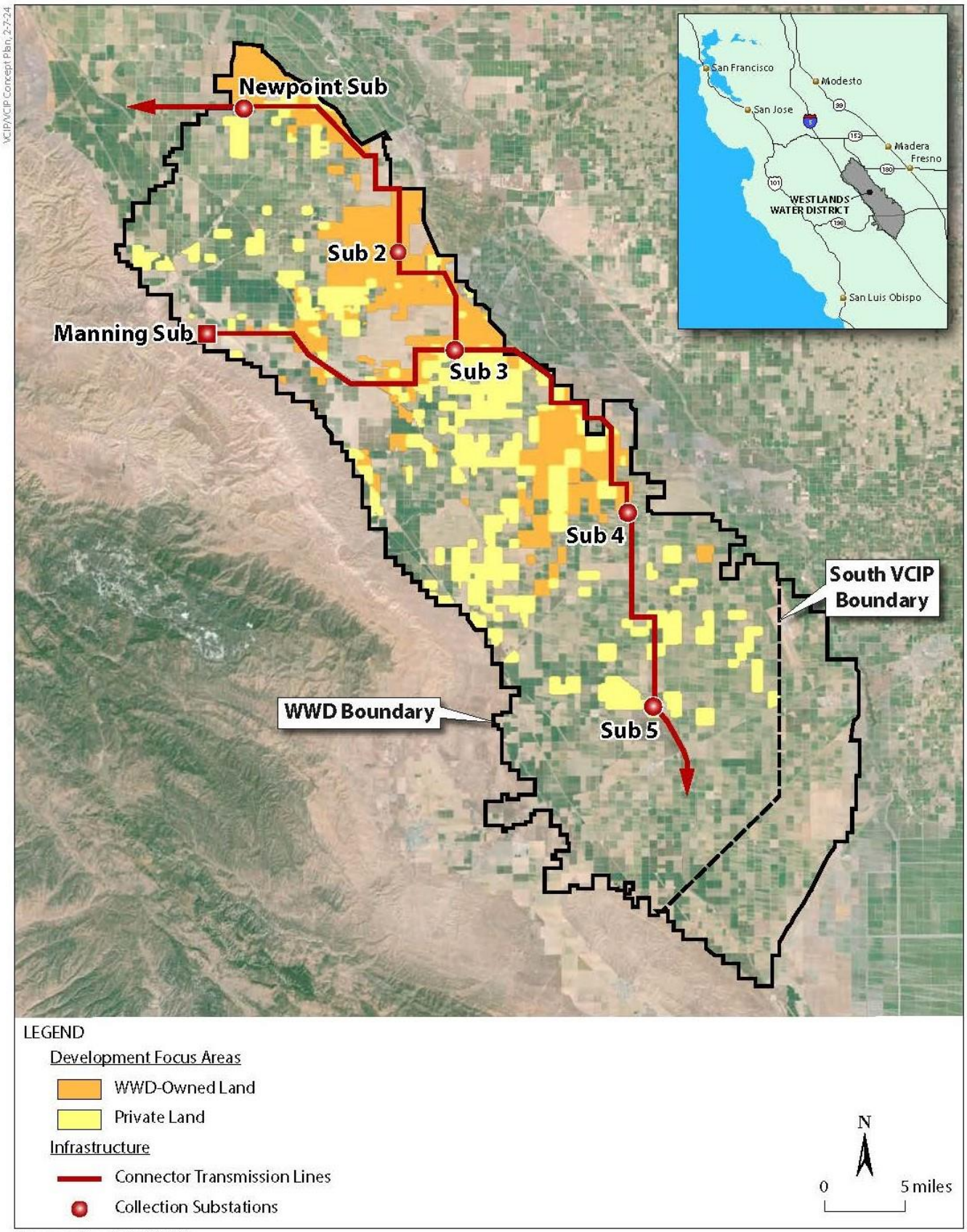
The primary components of the Energy Resource Plan consist of clean energy development in the form of: (1) solar PV generating facilities; and (2) stand-alone energy storage facilities, as described in turn below.

1. Solar PV Generating Facilities

The individual solar PV facilities would range in size from 100 MW (on approximately 640 acres) to about 1,150 MW (on approximately 7,500 acres), with the latter representing the approximate maximum generation that can be accommodated by a double-circuit 230-kV gen-tie line. It is assumed that a typical solar PV facility would have a generating capacity of 250 MW and would occupy about 1,600 acres. This project size represents the approximate upper limit for project size that is manageable for construction contractors and for financing. It is assumed that each solar facility would include an on-site battery energy storage system (BESS) integrated into the project design with a maximum storage capacity equivalent to the facility's generation capacity. A typical facility could include up to 250 MW of storage. Currently, these facilities would likely utilize lithium-ion batteries but could include other technologies as described in Section 2.4.1.2**.** It is noted that while incorporation of energy storage facilities as an integral component of solar generating facilities has become standard, it is also likely that some potential VCIP projects would include solar facilities with smaller energy storage capacities or may have no on-site energy storage. However, it is unlikely that the typical 250-MW solar facility would include more than 250 MW of energy storage facilities. For purposes of this PEIR, it is assumed that the typical 250-MW solar PV facility will include 250 MW of energy storage. Each solar facility would also include O&M facilities, and an on-site 230-kV substation, which would convey the solar generation to a gen-tie line (described subsequently).

2. Energy Storage Facilities

As an alternative to co-locating and integrating the BESS facilities with the solar PV facilities, the VCIP also contemplates up to 10,000 MW of stand-alone energy storage facilities (with a total storage capacity of up to 40,000 MW hours) which would operate independently of solar generation facilities, and which would occupy a total combined land area up to approximately 500 acres. These facilities would provide temporary storage for solar power generated at off-site solar facilities, and would dispatch the stored power to the electrical grid when needed. It is anticipated that each stand-alone energy storage facility would have up to 1,150 MW of storage with a capacity of 4 hours per MW, or a total capacity of 4,600 MW hours (MWh), although advances in battery technology would allow for longer duration of storage per MW. The locations of these stand-alone energy storage facilities have not been determined, but it is anticipated that they would be located near the VCIP collection substations described below in order minimize the length of gen-tie lines. Currently, a typical energy storage facility would likely utilize lithium-ion batteries, but other storage technologies could be employed, as discussed in Section 2.4.1.2. The VCIP BESS facilities would be manufactured, installed, and maintained in accordance with all applicable fire codes and product standards. The BESS facilities would also be subject to testing pursuant to recent industry-standard test methods designed by UL Solutions (UL) to demonstrate compliance with all applicable fire safety and building code requirements for BESS systems.



VCIP Concept Plan
Figure ES -1

ES.4.2. INFRASTRUCTURE PLAN

The primary components of the proposed VCIP Infrastructure Plan consist of transmission and interconnection facilities, including: (1) Gen-Tie Lines; (2) Collection Substations; and (3) Connector Transmission Lines within the VCIP. These infrastructure facilities are described in turn below.

1. Gen-Tie Lines

Each solar PV generating facility and stand-alone energy storage facility would be served by a 230-kV generation-interconnection tie-line (gen-tie line) which would convey the generated power to one of five 500/230-kV collection substations within the VCIP. The gen-tie lines would branch out from each collection substation to serve the solar and energy storage facilities in the vicinity. The precise alignments of the gen-tie lines would depend on the size, location and timing of solar and energy storage projects as they are planned to come on-line.

2. Collection Substations

The Infrastructure Plan includes five collection substations which would be distributed from north to south along the backbone transmission corridor running though the eastern portion of the Plan Area (described below). These 500/230-kV substations would serve as collection points for power generated in the surrounding DFAs as received from the gen-tie network and would provide interconnection to the state and federal power systems. It is expected that each collection substation would accommodate approximately 4,000 MW of solar power generated at solar facilities occupying an average of about 26,000 acres around each substation. Each collection substation is anticipated to have a footprint of about 60 acres, to be located within a larger site of about 160 acres which would provide sufficient buffer area to accommodate the convergence of incoming gen-tie lines from the nearby solar generation and energy storage facilities.

It is noted that a new substation (Manning) is currently proposed within the VCIP Plan Area on the south side of W. Manning Avenue, approximately 2 miles west of I-5. The planned Manning Substation is currently in the CPUC approval process and is scheduled to be in service in June 2028. The Manning Substation is intended to add resilience to the larger electrical grid and will be constructed with or without the VCIP solar development. The CPUC approval process includes a CEQA-equivalent environmental review process which is independent of this PEIR. As such, the Manning Substation project is not part of the VCIP and is not covered in this PEIR except as a cumulative project. It is anticipated that up to 1,100 MW of VCIP solar generation, from 7,000 acres of solar facilities in the west-central portion of the Plan Area, would be conveyed to the state power grid through the Manning Substation.

3. Connector Transmission Lines within the VCIP

The five collection substations within the VCIP would be connected by a backbone transmission corridor running through the eastern portion of Plan Area in a northwest-southeast direction. This corridor would have a total length of approximately 59 miles and would collect VCIP-generated power and provide interconnection to the state and federal power systems.

It is anticipated that the VCIP connector transmission corridors would include up to two parallel 500-kV transmission lines within 1,000-foot wide corridors. The two parallel lines would require a combined right-of-way of approximately 450 feet, with the additional width included to provide equipment maneuvering space during construction as well as design flexibility at the engineering stage.

In addition, a central transmission corridor is planned to run east-west through the Plan Area to provide connection between the VCIP backbone corridor at Substation No. 3 and the new Manning Substation planned for the vicinity of W. Manning Avenue and Interstate 5. This connecting transmission corridor would be approximately 20 miles long and would provide an alternative path for energy exported from the VCIP to connect to the larger grid and provide redundancy and resilience to the system. As noted above, the Manning Substation is not part of the VCIP; however, the 20-mile connecting transmission line connecting the VCIP to the Manning Substation is part of the VCIP.

ES.4.3. VCIP DEVELOPMENT TIMELINE AND PHASING

It is anticipated that the VCIP solar facilities and infrastructure would be completed within an 11-year development period, with construction planned to start in 2028 and with full buildout anticipated in 2038. The VCIP development is planned to progress incrementally from north to south, such that solar PV and energy storage projects and their associated gen-tie lines would be constructed in conjunction with the incremental completion of collection substations and collector transmission lines, as they are extended southward through the Plan Area. For example, the DFAs around the Newpoint Substation in the north would be developed first, followed in subsequent years by development of DFAs around Substation 2, and so forth. In the early years, the development pace is expected to reach 2,300 MW per year, which will diminish slightly over time and result in an average annual development pace of about 2,000 MW. It is important to note that given the length of time required to complete the initial infrastructure improvements (e.g., the Newpoint Substation will require two years to complete, beginning in 2028), the solar PV projects are not planned to begin construction until a year later (e.g., 2029). Therefore, the buildout of the proposed Energy Resource Plan would be expected to occur over 10 years (e.g., 2029 through 2038).

It is recognized that the location and timing of individual solar and energy storage projects within the VCIP will depend on market conditions and technical factors, including the scheduling of interconnection to the electrical grid and the construction of internal collection and external transmission delivery facilities, which may vary from the sequence described above. However, the timeline and phasing concept presented above represents the District's best efforts to identify the most reasonably foreseeable scenario for purposes of analysis in the PEIR.

ES.4.4. TRANSMISSION DELIVERY LINES OUTSIDE THE VCIP

The development of renewable energy projects under the VCIP will drive the need for new transmission development outside the Plan Area to deliver the VCIP renewable generation to load centers in northern and southern California. As shown in Figure ES-2, these transmission delivery corridors extend far beyond the District's boundaries and are not part of the proposed VCIP. Since the planning and programming of these outside transmission lines will require coordinated efforts of Westlands Water District and potentially multiple state and federal agencies and utilities, it is speculative and premature to undertake specific route planning or design for such bulk transmission facilities. The conceptual transmission routes identified in this PEIR therefore have not been evaluated for the specific locations, constructability, desirability, cost, or likelihood of their successful permitting. They also have not been studied by transmission planning groups to identify their effects on other transmission systems.

However, the PEIR includes a conceptual description of potential transmission routes outside the Plan Area to allow a general discussion of environmental impacts associated with transmission line development for informational purposes. Based on preliminary power flow studies, the amount of generation that would be delivered to the regional load centers was estimated, which allowed the development of a conceptual plan of transmission routing and capacities that would be required to deliver renewable generation from the VCIP to the load centers.

Source: Google Earth 2024

Conceptual Transmission Corridors
Figure ES-2

Although no specific transmission routes or substation upgrades outside the Plan Area have been defined, it is assumed for conceptual planning purposes that the required new transmission lines would run adjacent to existing transmission corridors to major regional substations at the load centers. Specifically, it is assumed that these outside transmission corridors would extend north to the Tesla Substation and the Tracy Substation, west to the Moss Landing Substation, and south to the Midway Substation and the Vincent Substation (see Figure 2.4-1).

ES.5. SUMMARY OF ENVIRONMENTAL REVIEW

ES.5.1. TYPE OF ENVIRONMENTAL DOCUMENT – PROGRAM EIR

This EIR is a "Program EIR" as provided for in section 15168 of the CEQA Guidelines. Program EIRs are intended to provide plan-level or programmatic environmental review, as distinguished from project-level environmental review conducted for discretionary approvals of projects proposed for construction.

A Program EIR allows for a more comprehensive and coordinated consideration of effects and alternatives than would be practical for an EIR on separate individual actions, and ensures consideration of cumulative impacts that might be missed on a case-by-case basis. A Program EIR is not intended to examine the specific environmental effects associated with individual actions that may be undertaken under the larger program but are presently unforeseeable and would be determined at the project level. Subsequent environmental review may be required for later activities within the program pursuant to CEQA Guidelines section 15168(c) if they may result in effects not evaluated in the Program EIR.

ES.5.2. OVERVIEW OF ENVIRONMENTAL IMPACTS

Sections 4.1 through 4.18 in Chapter *4. Environmental Impact Analysis,* provide a detailed discussion of the environmental setting; direct, indirect, and cumulative impacts of the VCIP; and mitigation measures designed to avoid or substantially lessen potentially significant impacts to the extent feasible. Potential impacts related to the environmental topics identified in CEQA Guidelines Appendix G have been evaluated.

Issue Determined to Have No Impact

During the course of the District's scoping process for this PEIR, it was determined that no potentially significant impacts are expected relative to the topic of "Recreation." Therefore, this topic was not evaluated in detail in the PEIR but is briefly discussed Chapter *5. Effects Found Not To Be Significant*.

Topics Found to Have Less Than Significant Impacts

VCIP implementation would have a less-than-significant impact, or a less-than-significant impact with the implementation of mitigation measures, in the following environmental categories:

- Air Quality
- Biological Resources
- Cultural and Tribal Cultural Resources
- Energy
- Forestry Resources

- Geology, Soils and Paleontological Resources
- Greenhouse Gas Emissions
- Hazards and Hazardous Materials
- Hydrology and Water Quality
- Land Use and Planning
- Mineral Resources
- Noise
- Population and Housing
- Public Services
- Transportation
- Utilities and Service Systems
- Wildfire

Significant and Unavoidable Impacts

Section 15126.2(c) of the CEQA Guidelines requires that the EIR describe any significant impacts, including those that can be mitigated but not reduced to less-than-significant levels. The VCIP implementation would result in significant and unavoidable impacts in the following environmental topic areas:

- Aesthetics
- Agricultural Resources

Growth-Inducing Effects of the Proposed Project

CEQA Guidelines section 15126(d) requires each EIR to discuss the potential "growth-inducing impact of the proposed project." Section 15126.2(e) of the CEQA Guidelines provides that the growth-inducing impact of a project shall be addressed as follows: "[d]iscuss the ways in which the proposed project could foster economic or population growth, or the construction of additional housing, either directly or indirectly, in the surrounding environment. Included in this are projects which would remove obstacles to population growth (a major expansion of a wastewater treatment plant might, for example, allow for more construction in service areas). Increases in the population may tax existing community service facilities, requiring construction of new facilities that could cause significant environmental effects."

Typically, growth-inducing effects would be considered significant if a project may result in population growth that is above levels assumed in local and regional land use plans, or would result in urban growth beyond the areas designated for such growth in such land use plans.

The growth-inducing effects associated with implementation of the VCIP Energy Resource and Infrastructure Plans are discussed below.

Removal of Physical Obstacles to Growth

Growth inducement can occur where a project would result in expansions or extensions of infrastructure which can in turn support additional development. For example, road widenings add traffic capacity to the local transportation system, which can facilitate further growth. Extensions of potable water and sanitary sewer lines to previously unserved areas can facilitate development of additional lands to the extent that surplus capacity is available in the lines.

VCIP implementation would involve construction of supporting infrastructure such as gen-tie lines, collection substations, and connecting transmission lines to deliver the generated power to the electrical grid. This

infrastructure would be sized to accommodate only the collection and delivery of electrical generation from potential VCIP solar and Battery Energy Storage System (BESS) facilities. There would be no surplus infrastructure capacity that could serve additional electrical generation beyond that planned under the VCIP. VCIP implementation would not involve extensions of potable water or sanitary sewer lines. Therefore, the VCIP infrastructure elements would not be growth inducing.

Removal of Regulatory Obstacles to Growth

Growth inducement may occur where a project approval includes a major change in land use designation for the property, such as a General Plan amendment or zoning change which would allow the conversion of rural lands to urban uses. Such a land use change could also indirectly increase pressure for similar land use changes that would authorize the conversion of adjacent or nearby lands. Since no change in land uses or zoning designations would be required for VCIP development, approval of the VCIP would not set a precedent which might indirectly increase pressures for conversion of other lands. Therefore, the VCIP implementation would not be growth inducing by way of removing regulatory obstacles to future growth.

Stimulus for Economic Growth

Projects can stimulate economic growth through direct employment, as well as indirectly through demand for goods and services. This can contribute to incremental secondary effects such as increased hiring by suppliers. Projects can also generate additional property and sales tax revenue for local government, enabling expenditures on capital improvement projects that could also stimulate secondary economic activity. During the construction phase of development projects, temporary jobs are created and others supported in the purchase of materials. Upon full buildout of the VCIP, the solar/BESS facilities would include a total of approximately 800 permanent on-site operations staff plus about 400 occasional maintenance staff. This increase in permanent and part-time employment would occur incrementally as the VCIP facilities come online over the 10-year development period. Once fully operational, the energy and infrastructure facilities would require minimal materials or equipment. The economic stimulus resulting from VCIP facility operation would be relatively modest, resulting mainly from incremental employment growth, and would not be sufficient to induce additional growth in the region.

Population and Housing Growth

The potential VCIP energy and infrastructure facilities would not include residential components, so they would not directly induce population growth in the Plan Area or its vicinity. Non-residential projects can result in added population and increased local housing demand, to the extent that the project employees do not already live within commuting range. During construction of the VCIP facilities, it is expected that construction workers would be drawn from the local labor pool and that few workers would migrate to the area. It is expected that the permanent staff of each VCIP facility would almost entirely consist of existing residents in the area, although some specialized technical or supervisory personnel may transfer to the area if it is not feasible to hire locally. Thus, potential VCIP development may result in a slight increase in demand for housing locally. But this slight increase would be consistent with population projections contained in the 2024 Fresno County General Plan and other regional planning documents (see Section *4.14. Population and Housing*). It is expected that there will be an adequate supply of rental units to meet any incremental demand resulting from VCIP construction and operation. Therefore, any population and housing growth induced by VCIP implementation would be insubstantial.

Increased Power Generation

The VCIP solar facilities would add to the state's overall energy supply, which indirectly supports growth and development. However, the PV generation from implementation of the VCIP is intended to help meet the state's renewable energy targets under the Renewables Portfolio Standard (RPS) by replacing fossil-fueled generation with renewable generation. While the generation capacity that would be added by VCIP solar facilities to the state grid may be growth accommodating, the added generation would not remove any infrastructure obstacle or constraint to growth and therefore would not be considered growth inducing.

Significant Irreversible Environmental Changes

CEQA Guidelines section 15126(d) requires a discussion of the significant irreversible changes that would result from implementation of a proposed project and provides: "Uses of nonrenewable resources during the initial and continued phases of the project may be irreversible since a large commitment of such resources makes removal or nonuse thereafter unlikely." It further provides that primary impacts, and particularly secondary impacts such as providing transportation access to previously inaccessible areas generally commit future generations to similar uses. Section 15126.2(d) also provides that irreversible damage can result from environmental accidents associated with the project. Irretrievable commitments of resources should be evaluated to assure that such current consumption is justified.

As discussed in Chapter *7. Other CEQA Considerations*, the implementation of the VCIP would use and consume nonrenewable building materials and non-renewable energy resources. Use of nonrenewable materials and energy sources represents an irretrievable commitment of resources. However, the VCIP solar/BESS facilities would allow the decommissioning of fossil-fueled generating stations elsewhere. Thus, while some irretrievable commitment of nonrenewable resources would occur, this would be more than offset by the avoided commitment of nonrenewable resources at fossil generating facilities that would occur elsewhere in the state without the VCIP solar facilities. Therefore, implementation of the VCIP Energy Resource and Infrastructure Plans would not result in a significant irretrievable commitment of nonrenewable resources.

The VCIP facilities would not include the construction of public roadways or highways that could be used to provide public access to previously inaccessible areas. Thus, VCIP implementation would not result in indirect commitment of resources in the development of such previously inaccessible areas.

VCIP infrastructure such as the collection substations and connecting transmission lines would likely be retained as part of the state grid where they would serve a vital role in providing resilience and redundancy by providing alternative transmission pathways and to help avoid congestion on the overall grid. The use of the contemplated collection substations and connecting transmission lines would essentially be permanent. However, these facilities would transmit significant quantities of renewable resources, which would more than offset the consumption of nonrenewable resources associated with the collection substations and outside transmission lines. Therefore, implementation of the VCIP would not result in significant irreversible environmental changes in this regard.

A project would result in significant irreversible environmental changes if the project involves uses in which irreversible damage could reasonably foreseeably result from any potential environmental accidents associated with the project. Construction and operation of the VCIP facilities would involve the use of hazardous materials such as fuels, toxic materials imbedded in solar panels, and there are potential fire hazards associated with BESS facilities. However, all VCIP activities and facilities would be subject to regulations, codes, and industry-standard performance criteria designed to avoid and prevent potential contamination and environmental accidents. These applicable requirements would significantly reduce the likelihood and severity of accidents that could result in

irreversible environmental damage. Thus, the potential for permanent damage or contamination due to environmental accidents is insubstantial and is considered less than significant.

Therefore, implementation of the VCIP Energy Resource and Infrastructure Plans would not result in significant irreversible environmental changes.

ES.5.3. ALTERNATIVES TO THE PROPOSED PROJECT

To promote informed decision making, the purpose of the alternatives analysis under CEQA is to "focus on alternatives to the project or its location which are capable of avoiding or substantially lessening any significant effects of the project" (CEQA Guidelines, section 15126.6(b)). As discussed throughout Chapter 4 of this PEIR, the potentially significant impacts associated with VCIP implementation – which would occur over an approximately 40-to-50-year period, consisting of 10 years of construction, followed by operation (approximately 35 years for each project), and decommissioning – can largely be avoided or mitigated to less than significant levels through the mitigation measures identified in this PEIR. The following alternatives are evaluated to provide a comparison of relative impacts between the alternatives and development under the proposed VCIP over this period.

ES.5.3.1. No Project Alternative

CEQA Guidelines section 15126.6(e)(1) requires that the "specific alternative of 'no project' shall…be evaluated along with its impact." Chapter *6. Alternatives*, includes a description and evaluation of the environmental impacts associated with the No Project Alternative, relative to existing conditions and the impacts resulting from the proposed project. This analysis also includes a discussion of the ability of the No Project Alternative to meet the District's project objectives. The No Project Alternative assumes that incremental energy resource and infrastructure development and mitigation for such projects would continue to occur within the Plan Area on an ad hoc basis in the absence of a comprehensive plan for such development.

As discussed in Section 6.3.1., the No Project Alternative would result in lower levels of impact than VCIP implementation in some categories, but would result in greater or similar levels of impact in others. The No Project Alternative would result in relatively lower levels of impact in the categories of biological resources, cultural and tribal cultural resources, geology, soils and paleontology, noise, public services, wastewater disposal, and solid waste disposal, although all these impacts would be less than significant or fully mitigable with VCIP implementation. The No Project Alternative would result in greater levels of impact than VCIP implementation in the categories of air quality, energy, greenhouse gas emissions, and water supply. In the categories of energy, greenhouse gas emissions, and water supply, the proposed VCIP would provide substantially greater environmental benefits compared to the No Project Alternative. The No Project Alternative would have similar levels of impact to VCIP implementation in terms of hazards and hazardous materials, hydrology and water quality, mineral resources, land use and planning, and wildfire. While VCIP implementation would result in significant and unavoidable impacts relative to aesthetics and agricultural resources, the No Project Alternative would also result in significant and unavoidable impacts relative to aesthetics and agricultural resources. Thus, the No Project Alternative would not eliminate or substantially reduce such significant and unavoidable impacts. Therefore, given their similar impacts and the VCIP's distinct environmental benefits that would significantly advance the state's carbon neutrality targets, the No Project Alternative is not an environmentally superior alternative to implementation of the proposed VCIP. Moreover, the No Project Alternative would not go as far as the VCIP in fulfilling the project objectives, as restated at the beginning of this chapter, particularly the objectives related to enhancing water supply reliability, facilitating SGMA implementation, and helping to meet the state's

renewable energy and greenhouse gas reduction targets through long-term but temporary repurposing of farmland for the generation of fossil-free sources of electricity.

ES.5.3.2. Reduced Project Size Alternative

This alternative assumes that only 72,000 acres, which are owned by the District and have been removed from irrigated agriculture, would be included in DFAs for development of solar and energy storage facilities. (This area is shown in Figure 2.3-1 as "District-Owned Land.") Renewable energy projects would not occur on the 64,000 acres of privately owned lands, as contemplated by the VCIP. Instead, these privately owned lands would remain in agricultural cultivation or fallowed. This alternative would have a generating capacity of approximately 11,000 MW, along with an equal amount of energy storage. The planned five substations and connecting transmission lines would remain in this alternative, albeit at approximately half of their planned capacities and sizes. It is assumed that construction of the Reduced Project Size Alternative would be phased over a period of 10 years, with an average buildout rate of about 1,100 MW per year. Like the VCIP, projects under the Reduced Project Size Alternative would also have an operations period of approximately 35 years.

As discussed in Section 6.3.2., the Reduced Project Size Alternative would result in lower levels of impact than VCIP implementation in some categories, but would result in greater or similar levels of impact in others. The Reduced Project Size Alternative would result in relatively lower levels of impact in the categories of agricultural resources, biological resources, cultural and tribal cultural resources, geology, soils and paleontology, hydrology and water quality, noise, public services, wastewater disposal, solid waste disposal, although all these impacts would be less than significant or fully mitigable with VCIP implementation. Compared to implementation of the proposed VCIP, selection of the Reduced Project Size Alternative would result in greater levels of impact in the categories of air quality, energy, and GHG emissions, and similar levels of impact to VCIP solar development in terms of hazards and hazardous materials, hydrology and water quality, noise, public services, wastewater disposal, and solid waste disposal, although all these impacts would be less than significant land use and planning, mineral resources, water supply, and wildfire. In addition, while VCIP implementation would result in significant and unavoidable impacts relative to aesthetics and agricultural resources, the Reduced Project Size Alternative would also result in significant and unavoidable impacts relative to aesthetics and agricultural resources. As such, their effects upon aesthetics and agricultural resources would be substantially similar. Overall, the proposed VCIP and the Reduced Project Size Alternative would result in substantially similar effects across most impact categories. However, in terms of their respective merits, the proposed VCIP would result in substantially greater environmentally beneficial effects related to renewable energy generation and storage (i.e., 21,000 MW generation capacity versus 11,000 MW generation capacity), which would offset substantially more GHG emissions associated with the consumption of fossil fuel to produce electricity. Thus, while the proposed VCIP and the Reduced Project Size Alternative are generally similar from an impacts perspective, the VCIP's substantially greater environmental benefits make the proposed VCIP environmentally superior. Relatedly, the Reduced Project Size Alternative would not go as far as the VCIP in fulfilling the basic project objectives of the VCIP, as restated at the beginning of this chapter, particularly the objectives related to water supply facilitating SGMA implementation, and helping to meet the state's renewable energy and GHG reduction targets through repurposing farmland affected by water supply constraints for the generation of fossil-free sources of electricity.

ES.5.3.4. Comparison of the VCIP and its Alternatives

The foregoing analysis of comparative impacts between the VCIP and the project alternatives is summarized in Table ES-1 (see below).

The No Project Alternative would result in somewhat lower impacts in several categories, and similar levels of impact in other categories relative to implementation of the proposed VCIP. However, if selected instead of the

VCIP, the No Project Alternative would result in greater impacts in several categories, such as energy, GHG emissions, and water supply because the VCIP would generate environmental benefits in these impact areas. Moreover, the No Project Alternative would not reduce the significant and unavoidable impacts relative to aesthetics and agricultural resources of VCIP implementation to less than significant. The No Project Alternative would also fail to satisfy many of the project objectives, unlike the proposed VCIP which would satisfy every project objective. Therefore, the No Project Alternative would not represent an environmentally superior alternative to the implementation of the proposed VCIP. Moreover, the No Project Alternative would not go as far as the VCIP in fulfilling the basic project objectives, particularly the objectives of achieving sustainable groundwater supplies in the District and helping to meet the state's renewable energy and GHG reduction targets through repurposing of less productive farmland for the generation of fossil-free sources of electricity.

TABLE ES-1

SUMMARY COMPARISON OF VCIP IMPLEMENTATION WITH PROJECT ALTERNATIVES

Impact Category	Level of Impacts		
		Impacts of Alternatives Compared to VCIP	
	VCIP	No Project Alternative	Reduced Project Size Alternative
Aesthetics	Significant & Unavoidable (SU)	Lower/SU*	Lower/SU*
Air Quality	Less than Significant	Greater	Greater
Agriculture & Forestry Resources	Significant & Unavoidable (SU)	Lower/SU*	Lower/SU*
Biological Resources	Less than Significant	Lower	Lower
Cultural & Tribal Cultural Resources	Less than Significant	Lower	Lower
Energy	Less than Significant	Greater	Greater
Geology, Soils, & Paleontology	Less than Significant	Lower	Lower
Greenhouse Gas Emissions	Less than Significant	Greater	Greater
Hazards & Hazardous Materials	Less than Significant	Similar	Similar
Hydrology & Water Quality	Less than Significant	Lower	Similar
Land Use & Planning	No Impact	Similar	Similar
Mineral Resources	Less than Significant	Similar	Similar
Noise	Less than Significant	Lower	Lower
Public Services	Less than Significant	Lower	Lower
Transportation	Less than Significant	Lower	Lower
Utilities & Service Systems	Less than Significant	Mixed	Mixed
Wildfire	Less than Significant	Similar	Similar
Environmentally Superior Alternative?	**Yes**	**No**	**No**

* The impact under the alternatives would remain Significant and Unavoidable.

The Reduced Project Size Alternative would result in somewhat lower levels of impact under several categories, and similar levels of impact in other categories relative to implementation of the proposed VCIP. However, as provided above, in most of these categories, the impacts associated with implementation of the proposed VCIP would already be less than significant. Additionally, selecting the Reduced Project Size Alternative instead of the VCIP would diminish key environmental benefits provided by the VCIP regarding energy, GHG emissions, and water supply. Moreover, the Reduced Project Size Alternative would not eliminate the significant and unavoidable relative to aesthetics and agricultural resources of VCIP implementation to less than significant. The Reduced Project Size Alternative would also fail to satisfy many of the project objectives, unlike the proposed VCIP which would satisfy every project objective. On balance, the Reduced Project Size Alternative would not be the environmentally superior alternative because, while it would result in generally lower levels of impact in most categories compared to implementation of the proposed VCIP, it would not provide full environmental benefits from implementation of the VCIP as proposed. In particular, the Reduced Project Size Alternative would not go as far as the proposed VCIP in meeting the objectives related to water supply, facilitating SGMA implementation, and helping to meet the state's renewable energy and GHG reduction targets through repurposing of farmland affected by water supply constraints for the generation of fossil-free sources of electricity.

ES.5.3.5. Alternatives to the VCIP Considered but not Included in Detailed Alternatives Analysis

While selecting a reasonable range of project alternatives, the CEQA Guidelines require the following:

"The EIR should also identify any alternatives that were considered by the lead agency but were rejected as infeasible during the scoping process and briefly explain the reasons underlying the lead agency's determination." (CEQA Guidelines, section 15126.6(c).)

Alternatives may be eliminated from detailed consideration in an EIR if they fail to meet most of the project objectives, are infeasible, or do not avoid or substantially reduce any significant environmental effects (CEQA Guidelines Section 15126.6(c)). Alternatives that are remote or speculative, or the effects of which cannot be reasonably predicted, also do not need to be considered (CEQA Guidelines, section 15126.6(a), (c), (f)(1)).

The following potential alternatives were eliminated from further consideration in the EIR because they failed to meet most of the District's project objectives, were infeasible, and/or did not avoid or substantially reduce any significant environmental effects:

- **Reduced Project Size Alternative Which Includes Only Privately-Owned DFA Lands:** This alternative represented a mirror image to the Reduced Project Size Alternative which included only District-owned DFA lands but was not feasible due to the dispersed nature of the privately-owned DFA lands, and would result in greater impacts related to agricultural resources.

- **Alternative Project Location for the VCIP:** This alternative considered the southeastern desert area of California, but that entire area is the subject of the adopted Desert Renewable Energy Conservation Plan (DRECP), and no other suitably sized contiguous lands are available in California.

- **Alternative Project Location for VCIP Collection Substation No. 5:** The objective of this alternative was to identify an alternative for the substation site which did not involve the permanent conversion of prime farmland, but no feasible alternative sites were identified.

- **Alternative Solar Technologies:** The alternative technology considered was concentrated solar which was determined to not be feasible for several reasons.
- **Green Hydrogen**: This alternative was found to be infeasible for several reasons.
- **Other Forms of Renewable Energy**: This analysis considered wind generation, small hydroelectric plants, and cogeneration, all of which were determined to be infeasible in the Plan Area.
- **Distributed Generation:** This alternative was found to not meet the basic project objectives.
- **Demand Management/Conservation**: This alternative was not considered feasible and did not meet the basic project objectives.

ES.5.4. SUMMARY OF IMPACTS AND MITIGATION MEASURES

Table ES-2 summarizes the environmental impacts associated with implementation of the proposed VCIP, and the recommended mitigation measures, that, if adopted, would avoid or substantially reduce potential significant impacts of the Project, as discussed in detail in Chapter *4. Environmental Impact Analysis.*

TABLE ES-1
SUMMARY OF IMPACTS AND MITIGATION MEASURES

POTENTIAL IMPACTS	MITIGATION MEASURES (MMS)
4.1. AESTHETICS	
AES-1. Substantial Adverse Effect on a Scenic Vista	
VCIP Energy Resource and Infrastructure Plans. The VCIP Plan Area is not part of a recognized scenic vista, nor are scenic vistas available from the Plan Area; therefore, VCIP implementation would not have a substantial adverse effect on a scenic vista. **(*Less-than-Significant Impact*)**	**No mitigation is required.**
AES-2. Substantially Damage Scenic Resources	
VCIP Energy Resource and Infrastructure Plans. Implementation of the VCIP Energy Resource and Infrastructure Plans would not substantially damage scenic resources. **(*Less-than-Significant Impact*)**	**No mitigation is required.**
AES-3. Substantially Degrade Existing Visual Character and Quality and Compliance with Applicable Zoning Regulations	
VCIP Energy Resource and Infrastructure Plans. Implementation of the VCIP Energy Resource and Infrastructure Plans would result in substantial changes to the visual character of the Plan Area. Whether these changes would substantially degrade the existing visual character or quality of the site and its surroundings depends on the individual circumstances of each VCIP project, with the level of impact ranging from no impact to significant. With respect to VCIP implementation adjacent to urbanized areas, the VCIP would not conflict with applicable zoning regulations governing scenic quality. **(*Plan Level – Significant Impact;* *Project Level Impact – To be determined for each project*)**	**MM AES-1: Visual Mitigation** To avoid or substantially reduce potential visual impacts from VCIP implementation, the following mitigation measures are identified for implementation at the project stage, as applicable: 1) For VCIP solar and energy storage projects located adjacent to public roadways: On the solar/energy storage project site, provide a 50-foot setback from the road right-of-way to the nearest project structure, not including fencing or internal driveways; 2) For residences with planned solar/energy storage projects contiguous to any residential property line: On the solar/energy storage project site, provide a 50-foot setback from the contiguous residential property line(s) to the nearest project structure, not including fencing or internal driveways; 3) At each VCIP energy resource and infrastructure project site, the following project elements shall be located as far as practicable from the nearest residence, and shall be located no nearer than 400 feet from the nearest residential property boundary: O&M yard and buildings; project substations; battery energy storage facilities, and construction staging and laydown areas. **Significance After Mitigation:** **Plan Level – Significant Unavoidable Impact.** **Project Level – To be determined for each project.**

TABLE ES-1 (CONT'D)
SUMMARY OF IMPACTS AND MITIGATION MEASURES

POTENTIAL IMPACT	MITIGATION MEASURE (MM)
3.1. AESTHETICS (CONT'D)	
AES-4. Light and Glare	
VCIP Energy Resource and Infrastructure Plans. The VCIP energy and infrastructure projects would introduce new sources of light and low-level glare to the Plan Area; however, the VCIP facilities would be specifically designed and constructed to minimize light and glare and would not adversely affect day or nighttime views in the area. **(*Less-than-Significant Impact*)**	**No mitigation is required.**
4.2. AGRICULTURAL RESOURCES	
AG-1. Agricultural Land Conversion	
VCIP Energy Resource Plan. The solar and energy storage facilities developed on "Farmland" would not alter the physical and chemical properties of the affected agricultural soils, and upon decommissioning the soils would be restored to a condition suitable for agricultural uses. The temporary, albeit long-term, modification of the land for renewable energy facilities would not affect the long-term suitability of the soils for agricultural use. As discussed in the analysis below, implementation of the VCIP Energy Resources Plan would not result in the permanent conversion of "Farmland" and proposed renewable energy facilities thus would not be expected to result in a significant impact related to agricultural resources at the project level. Nevertheless, in light of the scope and duration of the long-term temporary modification of the Plan Area for renewable energy facilities and the need for project-level details (e.g., whether the proposed project includes sheep grazing or other ongoing agricultural activities) and site-specific information to assess the appropriateness and feasibility of mitigation measures (e.g., Fresno County General Plan Policy LU-A.23), this impact is conservatively considered *significant and unavoidable* at the plan level. **(*Significant Unavoidable Impact*)**	**MM AG-1: Protection of Long-Term Agricultural Land Capability** To avoid or substantially reduce any potential temporary and permanent impacts to agricultural land capability of Farmland due to the long-term temporary repurposing of Farmland for solar energy generation and battery energy storage under the VCIP, the following mitigation measures shall be implemented at the project stage: 1) Leases/Easements Required on Repurposed Farmland and Limitations on Duration: To ensure that the solar generation and energy storage use of the repurposed farmland will be limited in duration, the development rights for the repurposed lands shall be in the form of long-term leases or easements, and not fee simple. The lease or easement contracts shall specify terms of no longer than 35 years, at which time the lease or easement shall expire. The leases or easements may be extended by up to five years but only upon approval of a new land use permit by the approving agency. 2) Vegetation and Soil Management Plan. To ensure that lands temporarily repurposed for solar generation and/or energy storage uses are managed to preserve their long-term agricultural capability, each project proponent shall prepare a Vegetation and Soil Management Plan (VSMP) which shall be implemented for the duration of the lease/easement period through completion of decommissioning. The Plan shall include details on the following: [*Continued on next page*.]

TABLE ES-1 (CONT'D)
SUMMARY OF IMPACTS AND MITIGATION MEASURES

POTENTIAL IMPACT	MITIGATION MEASURE (MM)
4.2. AGRICULTURAL RESOURCES (CONT'D)	
AG-1. Agricultural Land Conversion (Cont'd)	
VCIP Energy Resource Plan (Cont'd)	[*Continued from preceding page*.] 1) soil testing and identification of soil amendments as needed; 2) the seed mixture to be used on-site, including native and desirable non-native, low-stature species; 3) pre-project soil preparation and seed application methods; 4) vegetation and soil condition goals, success criteria, monitoring schedule, and reporting requirements; 5) vegetation and soil maintenance procedures, including adaptive management guidelines and reseeding requirements; 6) timing of implementation. The VSMP shall cover the entire solar/BESS facility site including all areas of the property outside the fence lines of the solar arrays, BESS facilities, substations, and O&M facilities. Ongoing implementation of the VSMP shall be coordinated with the ongoing implementation of the Pest Management and Weed Abatement Plan (PMWAP). 3) Pest Management and Weed Abatement Plan. To prevent infestations of invasive weed and vertebrate pest species on lands repurposed for solar generation and energy storage uses, each project proponent shall prepare a Pest Management and Weed Abatement Plan (PMWAP) which shall be implemented for the duration of the lease/easement period through completion of decommissioning and site restoration. The PMWAP shall include details on the following: 1) pre-project inventory, mapping, and removal of invasive weed species prior to construction; 2) identification of target weed and pest species to be controlled during facility construction, operation, and decommissioning; 3) best management practices (BMPs) for prevention, monitoring, and adaptive management of weed and pest species; 4) treatment methods including guidelines for use of pesticides and herbicides; 5) reporting requirements. The prescribed weed control methods may include the use of long-term pre-emergent broadleaf herbicides selected for their specificity to target weed species with minimal anticipated impact on the establishment or health of annual grasses planted in accordance with the VSMP. Weed control methods generally shall not include the use of non-selective soil sterilants or other herbicides that result in long-term inactivity or prevent vegetation, and any application of such soil sterilants shall be limited to substations, BESS facilities, internal roads and driveways, and other limited areas required to be maintained as defensible spaces, to be determined at the project level on a case-by-case basis. The PMWAP shall cover the entire solar/BESS facility site including all areas of the property outside the fence lines of the solar arrays, BESS facilities, substations, and O&M facilities. Ongoing implementation of the PMWAP shall be coordinated with the ongoing implementation of the VSMP. [*Continued on next page*.]

TABLE ES-1 (CONT'D)
SUMMARY OF IMPACTS AND MITIGATION MEASURES

POTENTIAL IMPACT	MITIGATION MEASURE (MM)
4.2. AGRICULTURAL RESOURCES (CONT'D)	
AG-1. Agriculture Land Conversion (Cont'd)	
VCIP Energy Resource Plan (Cont'd)	[*Continued from preceding page*.] 4) Decommissioning and Soil Reclamation Plan. To ensure that lands repurposed for solar generation and battery storage use are restored to a condition suitable for the resumption of agricultural uses, each project proponent shall prepare a Decommissioning and Soil Reclamation Plan (DSRP) which shall be implemented within six months of cessation of operations at the facilities. The DSRP shall include details on the following: 1) description and photographic inventory of the project site and soils prior to the start of initial site disturbing activities; 2) removal of all above-ground and below-ground project fixtures, equipment, foundations, and gravel driveways; 3) grading and tilling to restore surface soils and subgrade soils to a density and depth consistent with their pre-project condition; 4) revegetation of newly exposed soils in accordance with the VSMP. The implementation of the DSRP shall be ensured through the posting of adequate financial assurance by the project proponent prior to issuance of the first building permit for the project, in accordance with the Financial Assurance Requirements below. The DSRP shall include an appendix containing the Engineer's Cost Estimate that specifies the amount of the financial assurance to be provided. 5) Financial Assurance Requirements. To ensure implementation of the Decommissioning and Soil Reclamation Plan upon cessation of facility operations, each project proponent shall post an adequate form of financial assurance to the satisfaction of the District or other lead agency with permitting authority over the project, as prescribed here: 1) submittal of a cash bond, Certificate of Deposit, letter of credit, or other financial assurance acceptable to the approving agency; 2) the amount of the financial assurance shall be as specified in an Engineer's Cost Estimate for decommissioning in present value, as approved by the approving agency; 3) the amount of the financial assurance shall be reviewed at least every 10 years and within six (6) months of decommissioning and adjusted to reflect the then current cost estimate for decommissioning; 4) the amount of the financial assurance shall be supplemented every 10 years based on the updated Engineer's Cost Estimate, with the final supplement to be provided at the cessation of facility operations, such that the total amount shall be sufficient to cover the full cost of decommissioning and reclamation. The sufficiency of the cost estimate and the financial assurance for purposes of achieving full decommissioning and site reclamation in accordance with the Reclamation Plan shall be determined by the District or other lead agency prior to execution of the deconstruction contract for decommissioning. [*Continued on next page*.]

TABLE ES-1 (CONT'D)
SUMMARY OF IMPACTS AND MITIGATION MEASURES

POTENTIAL IMPACT	MITIGATION MEASURE (MM)
4.2. AGRICULTURAL RESOURCES (CONT'D)	
AG-1. Agricultural Land Conversion (Cont'd)	
VCIP Energy Resource Plan (Cont'd)	6) Right to Farm Ordinance. The applicant must acknowledge Fresno County's Right to Farm Ordinance and shall be required to record a Right to Farm Notice prior to issuance of any permits. This shall be included as a recommended Condition of Approval of the land use entitlement. **Significance after Mitigation: Significant and Unavoidable Plan-Level Impact. No mitigation is required.**
VCIP Tie-Gen and Connector Transmission Lines. The VCIP gen-tie lines and connector transmission lines would result in the permanent loss of "Farmland" on a series of very small parcels occupied by the tower footings, which would be dispersed over the length of the corridors and would involve removal of a total of approximately 47 acres of "Farmland" throughout the total 339-mile length of the corridors. As discussed in the analysis below, the loss of this small aggregate acreage of dispersed Farmland is considered insubstantial within the overall farming units and would not represent a significant impact to agricultural resources. **(*Less-than-Significant Impact*)**	**No mitigation is required.**
VCIP Collection Substation No. 5. VCIP Substations No. 5 would involve the permanent conversion of approximately 60 acres of contiguous Farmland, which would represent a significant impact related to agricultural resources. **(*Significant Unavoidable Impact*)**	**MM AG-2: Mitigation for Farmland Conversion** Unless exempted by Fresno County pursuant to Fresno County General Plan Policy LU-A.23, to avoid or substantially reduce potential impacts due to permanent conversion of up to 60 acres of Farmland at the proposed location of VCIP Substation No. 5, one or a combination of the following mitigation measures shall be considered for implementation at the project stage to achieve a 1:1 ratio for lands permanently lost to nonagricultural uses as specified below: 1) Acquisition of conservation easements at a 1:1 ratio for lands permanently lost to nonagricultural uses. 2) Acquisition of fee title of agricultural mitigation land that may be held by a third party or the County, at a 1:1 ratio for lands permanently lost to nonagricultural uses. 3) Payment of in lieu fees paid to the County that may be used to acquire future mitigation property, equivalent to a 1:1 ratio for lands permanently lost to nonagricultural uses. 4) Payment of fees paid to mitigation banks for mitigation credits equivalent to a 1:1 ratio for lands permanently lost to nonagricultural uses. 5) Other forms of acceptable mitigation with provides the equivalent of a 1:1 ratio for lands permanently lost to nonagricultural uses. **Significance After Mitigation: Significant Unavoidable Impact.**

TABLE ES-1 (CONT'D)
SUMMARY OF IMPACTS AND MITIGATION MEASURES

POTENTIAL IMPACT	MITIGATION MEASURE (MM)
3.2. AGRICULTURAL RESOURCES (CONT'D)	
AG-2. Conflict with Agricultural Zoning and Williamson Act	
VCIP Energy Resource Plan. Agricultural Zoning: The VCIP solar and energy storage facility land uses would be expected to be consistent with the existing Fresno County agricultural zoning for the Plan Area, under which utility-scale solar development that complies with the County's Solar Facility Guidelines is a conditionally permitted use. Fresno County implements the Williamson Act through contracts with private landowners and assesses compatibility of proposed land uses with those contracts through identified principles and requirements. In light Fresno County's role and responsibilities in connection with implementation of the Williamson Act based on site-specific information at the project level, this impact is conservatively considered *significant and unavoidable* at the plan level. **(*Significant Unavoidable Impact*)** Williamson Act: Development of solar and energy storage facilities on lands subject to Williamson Act contracts would be expected to be consistent with the Williamson Act because they are considered electrical facilities and, as such, are deemed compatible uses within any agricultural preserve. These uses under the VCIP would also be consistent with Fresno County's Williamson Act Guidelines and the Williamson Act's principles of compatibility set forth in Government Code section 51238.1(a). Construction of solar generation and energy storage facilities on lands under Williamson Act contracts would not be expected to conflict with any Williamson Act contract. Fresno County implements the Williamson Act through contracts with private landowners and assesses compatibility of proposed land uses with those contracts through identified principles and requirements. In light Fresno County's role and responsibilities in connection with implementation of the Williamson Act based on site-specific information at the project level, this impact is conservatively considered *significant and unavoidable* at the plan level. **(*Significant Unavoidable Impact*).**	**Implement MMs AG-1 and AG-2, as applicable.**
VCIP Infrastructure Plan. Agricultural Zoning: Under the Fresno County Zoning Ordinance, electrical substations, gen-tie lines, and transmission lines are allowable uses in the Agricultural zone subject to an Unclassified Conditional Use Permit. Therefore, implementation of the VCIP Infrastructure Plan would not be expected to conflict with agricultural zoning. **(*No Impact*)** [*Continued on next page*.]	**Implement MMs AG-1 and AG-2, as applicable.**

TABLE ES-1 (CONT'D)
SUMMARY OF IMPACTS AND MITIGATION MEASURES

POTENTIAL IMPACT	MITIGATION MEASURE (MM)
4.2. AGRICULTURAL RESOURCES (CONT'D)	
AG-2. Conflict with Agricultural Zoning and Williamson Act (Cont'd)	
[*Continued from preceding page*.] Williamson Act: Under the Williamson Act, electrical facilities are deemed compatible uses within any agricultural preserve. These uses under the VCIP would also be consistent with Fresno County's Williamson Act Guidelines and the Williamson Act's principles of compatibility set forth in Government Code section 51238.1(a). Construction of VCIP substations, gen-tie lines, and transmission lines would not be expected to conflict with any Williamson Act contract. Fresno County implements the Williamson Act through contracts with private landowners and assesses compatibility of proposed land uses with those contracts through identified principles and requirements. In light Fresno County's role and responsibilities in connection with implementation of the Williamson Act based on site-specific information at the project level, this impact is conservatively considered *significant and unavoidable* at the plan level. **(*Significant Unavoidable impact*)**	**Implement MMs AG-1 and AG-2, as applicable.**
AG-3. Land Use Conflicts Resulting in Potential Conversion of Farmland to Non-	**Agricultural Uses**
VCIP Energy Resource Plan. The potential land use conflicts resulting from constructing the VCIP solar and energy storage facilities adjacent to ongoing agricultural operations on Farmlands would not directly or indirectly result in the conversion of those adjacent Farmlands to non-agricultural uses. **(*Less-than-Significant Impact*)**	**No mitigation is required.**
VCIP Infrastructure Plan. Construction of the VCIP collector substations, gen-tie lines, and connector transmission lines would not directly or indirectly result in the conversion of adjacent Farmlands to non-agricultural uses. **(*Less-than-Significant Impact*)**	**No mitigation is required.**
AG-4. Loss of Forest Land, Conflicts with Zoning for Forest Land or Timberland,	**or Potential Conversion of Forest Land to Non-Forest Use**
VCIP Energy Resource and Infrastructure Plans. Implementation of the VCIP Energy Resources and Infrastructure Plans would not directly result in the loss of forest land, would not conflict with zoning for forest land or timberland, and would not indirectly result in the conversion of forest lands to non-forest uses. **(*No Impact*)**	**No mitigation is required.**

TABLE ES-1 (CONT'D)
SUMMARY OF IMPACTS AND MITIGATION MEASURES

POTENTIAL IMPACT	MITIGATION MEASURE (MM)
4.3. AIR QUALITY	
AQ-1. Conflict with Air Quality Plans	
VCIP Energy Resource and Infrastructure Plans. Implementation of the VCIP Energy Resource and Infrastructure Plans would not conflict with or obstruct implementation of an applicable air quality plan. **(*Less-than-Significant Impact*)**	**No mitigation is required.**
AQ-2. Cumulatively Considerable Net Increase in Any Criteria Pollutant	
VCIP Energy Resource and Infrastructure Plans. Implementation of the VCIP Energy Resource and Infrastructure Plans would increase emissions of criteria pollutants; however, any increases would be reduced to below the applicable San Joaquin Valley Air Pollution Control District (SJVAPCD) criteria pollutant offset thresholds by mitigation measures and would not be cumulatively considerable. **(*Less-than-Significant Impact with Mitigation*)**	**MM AQ-1: Construction and Decommissioning Period Emissions Controls** To reduce potential emissions of criteria pollutants and their precursors for which the Plan Area is non-attainment during construction and decommissioning of individual VCIP projects, apply on- and off-site emissions reduction measures as required by the SJVAPCD. **Significance after Mitigation: Less-than-Significant Impact.**
AQ-3. Exposure of Sensitive Receptors to Substantial Pollutant Concentrations	
VCIP Energy Resource and Infrastructure Plans. Implementation of the VCIP Energy Resource and Infrastructure Plans would not expose sensitive receptors to substantial pollutant concentrations. **(*Less-than-Significant Impact*)**	**No mitigation is required.**
AQ-4. Other Emissions (such as Odors) Adversely Affecting a Substantial Number of People	
VCIP Energy Resource and Infrastructure Plans. Implementation of the VCIP Energy Resource and Infrastructure Plans would not result in other emissions (such as those leading to odors) that would adversely affect a substantial number of people. **(*Less-than-Significant Impact*)**	**No mitigation is required.**

TABLE ES-1 (CONT'D)
SUMMARY OF IMPACTS AND MITIGATION MEASURES

POTENTIAL IMPACT	MITIGATION MEASURE (MM)
4.4. BIOLOGICAL RESOURCES	
BIO-1. Impacts to Special Status Plants	
VCIP Energy Resource and Infrastructure Plans. Implementation of the VCIP Energy Resource and Infrastructure Plans could have a potentially substantial adverse impact on 11 special-status plant species that may be present within the Plan Area. **(*Less-than-Significant Impact with Mitigation*)**	**MM BIO-1: Protection of Special Status Plant Species** To avoid potentially significant impacts to special-status plant species due to VCIP implementation, the following mitigation measures are applicable at the project-specific level: a) Initial Biological Site Survey and Land Cover Mapping: Prior to site-specific project approval and any ground disturbance, a qualified biologist shall be retained to conduct an initial biological site survey and prepare land cover maps that delineate the habitat types present on the project site. Based on the habitat types found to be present on the project site, the biologist shall identify the specific species of protected plants, if any, that shall be subject to pre-construction surveys to be conducted prior to ground-disturbing activities for the project. b) Pre-construction Surveys: If potentially suitable habitats are detected on an individual project site during initial site surveys and land cover mapping, and prior to the initial ground disturbance for the project, a qualified biologist shall conduct a protocol-level rare plant survey following CDFW's 2018 *Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Sensitive Natural Communities* or the most recent CDFW guidelines. The survey shall target all suitable habitats of the project site that would be subject to project-related ground disturbance, and shall be conducted during appropriate times of year, when local populations of the target species are in bloom and readily identifiable. If suitable habitats are found to be absent, or if special-status plant species are found to be absent from the site, no further action is required. c) Avoidance: If individuals or populations of the target plant species are identified in planned disturbance areas, project design shall be modified, to the extent feasible, to avoid the plants. A qualified biologist shall identify an appropriate buffer around the plants, and no construction or other project-related activities shall be permitted within the area demarcated for the special-status plant species. [*Continued on next page*.]

TABLE ES-1 (CONT'D)
SUMMARY OF IMPACTS AND MITIGATION MEASURES

POTENTIAL IMPACT	MITIGATION MEASURE (MM)
4.4. BIOLOGICAL RESOURCES (CONT'D)	
BIO-1. Impacts to Special Status Plants (Cont'd)	
VCIP Energy Resource and Infrastructure Plans. (Cont'd)	[*Continued from preceding page*.] d) Relocation/Salvage: If it is not feasible to avoid individuals or populations of rare plant species observed on a project site, the affected populations shall be salvaged in accordance with a plan prepared by a qualified biologist and approved by CDFW that shall include contingencies for an unsuccessful salvage effort. Salvage methods may include seed collection and dispersal, and/or topsoil collection and redispersal, as appropriate to the species. The replacement planting and/or relocation area(s) shall be located on portions of the project site that support suitable habitat and soils for the affected species and that will not be subject to project-related ground disturbance. A replacement planting area shall occupy the same area (no net-loss of area) of the new population. A relocation area shall occupy a larger area than the original area (net-gain of area). Replacement planting and relocation areas shall be monitored for a period of five years to ensure successful establishment. Although annual plants' success in any single year depends on climatic conditions year-to-year, on average, replacement and/or relocation shall be implemented to achieve no net loss through replacement plantings that occupy the same area (no net-loss of area) of the new population, and relocation areas that occupy a larger area than the original area (net-gain of area). In addition, if federally protected rare plants are present on the site, the project proponent may be required to consult with the USFWS if there is a federal nexus for the individual project. **Significance after Mitigation: Less-than-Significant Impact.**
BIO-2. Impacts to Special Status Animals	
VCIP Energy Resource and Infrastructure Plans. Implementation of the VCIP Energy Resource and Infrastructure Plans could have a potentially substantial adverse impact on special-status animal species that may utilize the Plan Area as breeding and/or foraging habitat. **(*Less-than-Significant Impact with Mitigation*)**	**MM BIO-2: Protection of Special-Status Animal Species** To avoid potentially significant impacts to special-status animal species due to VCIP implementation, the following mitigation measures are applicable at the project-specific level: a) Initial Biological Site Surveys and Land Cover Mapping: Prior to site-specific project approval and any ground disturbance, a qualified biologist shall be retained to conduct an initial biological site survey and prepare land cover maps that delineate the habitat types present on the project site. Based on the habitat types found to be present on the project site, the biologist shall identify the specific species of protected animals, if any, that shall be subject to pre-construction surveys to be conducted prior to ground-disturbing activities for the project, as specified for each species in Mitigation Measures BIO-3 through BIO-13. [*Continued on next page*.]

TABLE ES-1 (CONT'D)
SUMMARY OF IMPACTS AND MITIGATION MEASURES

POTENTIAL IMPACT	MITIGATION MEASURE (MM)
4.4. BIOLOGICAL RESOURCES (CONT'D)	
BIO-2. Impacts to Special Status Animals (Cont'd)	
VCIP Energy Resource and Infrastructure Plans. (Cont'd)	[*Continued from preceding page*.] b) Minimization Measures: If individuals of any special-status animal species that are considered to occur rarely to occasionally within the Plan Area are found to be present on a project site prior to or during project construction, the animal(s) shall be allowed to move off-site independently. Alternatively, a qualified biologist may assist the individual(s) with moving off the project site. **Significance after Mitigation: Less-than-Significant Impact.**
BIO-3. Disturbance to Active Raptor and Migratory Bird Nests	
VCIP Energy Resource and Infrastructure Plans. Implementation of the VCIP Energy Resource and Infrastructure Plans could result in disturbance to active nests of raptors and migratory birds. **(*Less-than-Significant Impact with Mitigation*)**	**MM BIO-3: Protection of Raptor and Migratory Bird Nests** To minimize disturbance to any active raptor and other bird nests due to VCIP implementation, the following mitigation measures are applicable at the project-specific level: a. Pre-Construction Surveys for Active Nests. If tree removal, site preparation, grading, construction, or decommissioning is planned to occur within the breeding period (i.e., between February 1 and August 31), a qualified biologist shall be retained to conduct pre-construction surveys for active nests of migratory birds within 10 days of the onset of these activities. If construction or decommissioning activity is planned to commence outside the breeding period, no pre-construction surveys are required for nesting birds and raptors. b. Exclusion Zones for Active Nests. If any active nests are discovered in or near the planned construction zones on or adjacent to the project site, the qualified biologist shall monitor identified nests to establish a behavioral baseline. Once work commences, the qualified biologist should monitor all nests to detect any behavioral changes because of the project. If behavioral changes are observed, stop the work causing that change and consult with the California Department of Fish and Wildlife for additional avoidance and minimization measures. c. Establish Exclusion Zones. Alternatively, should any active nests be discovered in or near planned construction zones, the qualified biologist shall establish an appropriate construction-free buffer (exclusion zone) around the nest depending on the species of bird, activity level of the area, and terrain. This exclusion zone shall be identified on the ground with flagging or fencing and shall be maintained until the qualified biologist has determined that the young have fledged. [*Cont'd*]

TABLE ES-1 (CONT'D)

SUMMARY OF IMPACTS AND MITIGATION MEASURES

POTENTIAL IMPACT	MITIGATION MEASURE (MM)
4.4. BIOLOGICAL RESOURCES (CONT'D)	
BIO-3. Disturbance to Active Raptor and Migratory Bird Nests (Cont'd)	
VCIP Energy Resource and Infrastructure Plans. (Cont'd)	[*Continued from preceding page*.] d. Tailgate Training for Workers. All construction and operations workers on the project site shall be trained by a qualified biologist. The tailgate (on-site) training shall include a description of the Migratory Bird Treaty Act, instructions on what to do if an active nest is located, and the importance of capping pipes and pipe-like structures standing upright to avoid birds falling into the pipes and getting stuck. e. Capping of Hollow Poles and Posts. Should any vertical tubes, such as solar mount poles, chain link fencing poles, or any other hollow tubes or poles be utilized on the project site, the poles shall be capped immediately after installation to prevent entrapment of birds. **Significance after Mitigation: Less-than-Significant Impact.**
BIO-4. Impacts to Long Horn Fairy Shrimp	
VCIP Energy Resource and Infrastructure Plans. Implementation of the VCIP Energy Resource and Infrastructure Plans could result in potentially substantial adverse impacts to longhorn fairy shrimp, a federally listed endangered species**. (*Less-than-Significant Impact with Mitigation*)**	**MM BIO-4: Protection of Longhorn Fairy Shrimp** To minimize potentially significant impacts to longhorn fairy shrimp due to VCIP implementation, the following mitigation measures are applicable at the project-specific level: a) Habitat Survey. Conduct initial biological survey and habitat mapping for the project as set forth in Mitigation Measure BIO-1a. If the initial biological survey on the project site determines that vernal pools or seasonal wetlands are present on the site, the project proponent may either assume presence of the longhorn fairy shrimp, or conduct protocol surveys as specified in Mitigation Measure BIO-4b. Protocol surveys for longhorn fairy shrimp are not required if the initial biological survey determines suitable habitats are absent from the project site. b) Species-Specific Surveys. If suitable habitats are present on the project site protocol surveys during normal rainfall years, consisting of either (1) surveys in two wet seasons, or (2) one wet season and one dry season survey are required to demonstrate the species is absent from an individual project site. Wet-season sampling entails the sampling of all pools at 10-day intervals after the pools have filled with water. [*Continued on next page*.]

TABLE ES-1 (CONT'D)

SUMMARY OF IMPACTS AND MITIGATION MEASURES

POTENTIAL IMPACT	MITIGATION MEASURE (MM)
4.4. BIOLOGICAL RESOURCES (CONT'D)	
BIO-4. Impacts to Long Horn Fairy Shrimp (Cont'd)	
VCIP Energy Resource and Infrastructure Plans. (Cont'd)	[*Continued from preceding page*.] Ten to 12 sampling visits are generally required during a winter of average rainfall, depending on rainfall patterns. The USFWS can reject negative findings from any wet season survey if conditions are below normal in rainfall or if the rainfall pattern was highly skewed (e.g., all falling within a very short period). Dry season surveying involves collecting soil from the bottoms of on-site vernal pools, examining the soil for potential longhorn fairy shrimp eggs, and, if any potential longhorn fairy shrimp eggs are identified, rearing shrimp from these eggs to determine if they are longhorn fairy shrimp. The USFWS will consider listed vernal pool species to be absent from a site if two wet season surveys are negative, or if a dry season survey combined with a subsequent wet season survey in a normal year are negative. If protocol surveys do not detect presence of longhorn fairy shrimp on the project site, no mitigation is required. If longhorn fairy shrimp are observed early in the survey period and the USFWS agrees that continuing the surveys after shrimp have been found is unnecessary, then further surveys would not be required, and all vernal pool habitat on the site shall be considered inhabited by this species. Alternatively, the entire survey effort could be foregone and the presence of this species on the site may be presumed with the understanding that doing so would require mitigation measures for the take of this species. c) Obtain "Take" Authorization. Direct and possibly indirect disturbance to vernal pools of the site would be considered a "take" of this federally listed species if this species is detected or if presence is assumed by the project proponent. The "take" of this species would require the project proponent obtain take authorization from the USFWS under Section 7 of the federal Endangered Species Act (ESA) (applicable if there is federal nexus, such as the requirement for Section 404 permit under the federal Clean Water Act for fill of a jurisdictional wetland) or Section 10 (if no federal nexus). If the project has a federal nexus, then a Section 7 consultation process must be initiated by the USACE (the applicable federal permitting agency) prior to the issuance of the Section 404 permit. Once the consultation process has formally begun, the USFWS has 135 days to issue either a Biological Opinion (BO), which would authorize the take of a listed species incidental to the implementation of a lawful project, or a jeopardy opinion (which is rare) which would determine that the "take" of the listed species would jeopardize the continued existence of the species. If there is no federal nexus, the project proponent would need to obtain take authorization under Section 10 of the ESA, which is a process administered by the USFWS Endangered Species Branch in Sacramento. [*Continued on next page*.]

TABLE ES-1 (CONT'D)
SUMMARY OF IMPACTS AND MITIGATION MEASURES

POTENTIAL IMPACT	MITIGATION MEASURE (MM)
4.4. BIOLOGICAL RESOURCES (CONT'D)	
BIO-4. Impacts to Long Horn Fairy Shrimp (Cont'd)	
VCIP Energy Resource and Infrastructure Plans. (Cont'd)	[*Continued from preceding page*.] d) Typical Mitigation Measures. Take authorization would require avoidance and minimization measures, as well as compensatory mitigation measures which would reduce the magnitude of the "take" of this species. Current mitigation standards of the USFWS for this species consist of the following: 1) a 250-foot buffer around avoided pools in which fairy shrimp occur; 2) the preservation of existing fairy shrimp habitat at a 2:1 ratio; and 3) the creation of new shrimp habitat at a 1:1 ratio. The preservation requirement can be met by purchasing preservation credits from an agency approved mitigation bank and the creation requirement can be met by purchasing vernal pool creation credits from either the applicable in-lieu fee program or a USACE approved mitigation bank. Indirect impacts to preserved vernal pool habitat can generally be avoided if a development-free buffer of 250 feet is provided around preserved pools. A buffer of this size may not be sufficient if the planned development is within the watershed of the pool such that runoff drains from developed areas of the project site into the vernal pool or deprives the vernal pool of natural runoff water. **Significance after Mitigation: Less-than-Significant Impact.**
BIO-5. Impacts to Crotch's Bumble Bee	
VCIP Energy Resource and Infrastructure Plans. Implementation of the VCIP Energy Resource and Infrastructure Plans could result in potentially substantial adverse impacts to Crotch's bumble bee, a candidate species for state listing as threatened or endangered. **(*Less-than-Significant Impact with Mitigation*)**	**MM BIO-5: Protection of Crotch's Bumble Bee** To minimize impacts to the Crotch's bumble bee due to VCIP implementation, the following mitigation measures are applicable at the project-specific level: a) Habitat Assessment. Conduct initial biological survey and habitat mapping for the project as set forth in Mitigation Measure BIO-1a. If the initial biological survey on the project site determines that there is no potential for Crotch's bumble bee to occur on the site, no additional surveys are required. If there is potential for the species to occur on the site, conduct pre-construction surveys as specified in Mitigation Measure BIO-5b. [*Continued on next page*.]

TABLE ES-1 (CONT'D)
SUMMARY OF IMPACTS AND MITIGATION MEASURES

POTENTIAL IMPACT	MITIGATION MEASURE (MM)
4.4. BIOLOGICAL RESOURCES (CONT'D)	
BIO-5. Impacts to Crotch's Bumble Bee (Cont'd)	
VCIP Energy Resource and Infrastructure Plans. (Cont'd)	[*Continued from preceding page*.] b) Preconstruction Surveys. A qualified biologist shall conduct pre-construction surveys during the three stages of Crotch's bumble bee flight period with a methodology approved by CDFW, as provided in CDFW's 2023 *Survey Considerations for California Endangered Species Act (CESA) Candidate Bumble Bee Species* or its most recent guidance document. This survey shall be conducted during the season prior to the start of work (i.e., if work is scheduled to start in the late summer, surveys may be conducted that same year; if work is scheduled to start in winter or early spring, the surveys shall occur during the year before the year construction is scheduled). If Crotch's bumble bees are observed on the site, intensive surveys shall be required as specified in Mitigation Measure BIO-5c. c) Intensive Surveys and Take Avoidance. If Crotch's bumble bees are observed on the site, intensive surveys to locate underground nests shall be conducted. If an underground nest is located, individuals at the nest shall be photographed to confirm species. If the underground nest is confirmed to be occupied by Crotch's bumble bees, the nest shall be flagged and a 25-foot exclusion zone established around the nest. An avoidance plan shall be developed in consultation with CDFW prior to any project work and/or vegetation removal or other ground disturbance within the 25-foot exclusion zone. d) Compensation. If Crotch's bumble bee is found to be present on-site and if take avoidance is not feasible, then a mitigation plan that provides for on- or off-site compensation shall be prepared and implemented. The mitigation plan shall provide for a minimum of a 1:1 replacement ratio of suitable habitat, at an onsite or offsite location. The plan shall define measures to restore and/or enhance existing habitat, management strategies to maintain the conservation value of the habitat in perpetuity, and a funding source for the ongoing management of the mitigation site. If the Crotch's bumble bee is permanently listed as threatened or endangered prior to the time of project development, the project proponent will be required to obtain an Incidental Take Permit from CDFW under the California Endangered Species Act (CESA). If the California Fish and Game Commission decides to not list the Crotch's bumble bee under the CESA, then implementation of Mitigation Measures BIO-5b through BIO-5d would not be required. **Significance after Mitigation: Less-than-Significant Impact.**

TABLE ES-1 (CONT'D)
SUMMARY OF IMPACTS AND MITIGATION MEASURES

POTENTIAL IMPACT	MITIGATION MEASURE (MM)
4.4. BIOLOGICAL RESOURCES (CONT'D)	
BIO-6. Impacts to Western Spadefoot Toad and North-	**western Pond Turtle**
VCIP Energy Resource and Infrastructure Plans. Implementation of the VCIP Energy Resource and Infrastructure Plans could result in potentially substantial adverse impacts to western spadefoot toad and northwestern pond turtle. **(*Less-than-Significant Impact with Mitigation*)**	**MM BIO-6: Protection of the Western Spadefoot Toad and Northwestern Pond Turtle** To reduce the likelihood of mortality to the western spadefoot and northwestern pond turtle due to VCIP implementation, the following mitigation measures are applicable at the project-specific level: a) Habitat Assessment. Conduct initial biological survey and habitat mapping for each project as set forth in Mitigation Measure BIO-1a. If the initial biological survey on the project site determines that there is no suitable breeding habitat for western spadefoot toad (i.e., vernal pools or ephemeral pools, including some ponded water which holds water for at least two weeks to one month), no species-specific surveys for the western spadefoot are required. If suitable breeding habitat for western spadefoot is present on the project site, then in addition to Mitigation Measure BIO-6c, the project proponent shall either implement Mitigation Measure BIO-6b (elective surveys) *or* BIO-6d (assumed presence). If suitable habitat for the northwestern pond turtle is present on the project site, then Mitigation Measure BIO-6c would be required to be implemented. b) Elective Species-Specific Surveys. Instead of assuming the presence of western spadefoot pursuant to Mitigation Measure BIO-6d, the project proponent may retain a qualified biologist to survey the project site for the presence of suitable habitat for western spadefoot during the appropriate times in March, April, and May in an at least average rain year when any western spadefoot would be above ground and observable. If western spadefoot toads are identified at or near wetland features, those features shall have exclusion zones established, as specified in MM BIO-6d, prior to ground disturbing activity associated with the project, as specified in Mitigation Measure BIO-6c. c) Preconstruction Surveys. During the course of the construction surveys for other species, a qualified biologist shall also determine the presence or absence of western spadefoot toads and suitable breeding habitat for this species (i.e., vernal pools or ephemeral pools, including some ponded water which holds water for at least two weeks to one month) prior to the start of ground disturbing activities. The absence of western spadefoot can only be confirmed through the species-specific surveys described in MM BIO-6b. Thus, if only pre-construction surveys for other species are conducted for western spadefoot, then the presence of western spadefoot shall be assumed pursuant to MM BIO-6d. [*Continued on next page*.]

TABLE ES-1 (CONT'D)
SUMMARY OF IMPACTS AND MITIGATION MEASURES

POTENTIAL IMPACT	MITIGATION MEASURE (MM)
4.4. BIOLOGICAL RESOURCES (CONT'D)	
BIO-6. Impacts to Western Spadefoot Toad and North-	**western Pond Turtle (Cont'd)**
VCIP Energy Resource and Infrastructure Plans. (Cont'd)	[*Continued from preceding page*.] Pre-construction surveys for the northwestern pond turtle shall also be conducted during this time. If construction is scheduled to begin during northwestern pond turtle nesting season (late May through mid-July), a qualified biologist shall conduct a survey within the project site for nests within 1,000 feet of any suitable water feature. If a northwestern turtle nest is observed, a construction-free buffer shall be established by the qualified biologist around the nest until young have hatched and moved from the nest. If spadefoot or northwestern pond turtle individuals of these species are found to be present on a project site prior to or during project construction, they shall be allowed to move off-site independently. Alternatively, a qualified biologist may assist the individual(s) with moving off the project site. d) Avoidance and Monitoring. If a northwestern pond turtle is identified during pre-construction surveys within any area subject to project impacts, the turtle shall be avoided until it has moved out of the work area on its own or relocated by the qualified biologist. If potential breeding habitat for western spadefoot is identified during preconstruction surveys within or immediately adjacent to an area subject to project impacts, and species-specific surveys described in MM BIO-6b have not been conducted, then presence of the western spadefoot on the site shall be assumed. A project activity-buffer of 860 feet (262 meters) from those breeding pools shall be established, as this is the maximum distance spadefoot toads have been recorded away from their breeding pool. This distance is necessary, as spadefoot toads dig straight down and leave no trace on the surface of where they are located, and they spend most of their lives underground—without an indication of where they are buried; therefore, a conservative buffer must be established. Buffers shall remain until absence can be confirmed through appropriate surveys as specified in MM BIO-6b. e) Compensation. If impacts to western spadefoot toads are anticipated, mitigation shall consist of either: 1) preservation of suitable on- or off-site land at a minimum of a 1:1 impact-to-mitigation ratio of lost habitat acreage to compensatory habitat acreage which can support the various lifecycles of the western spadefoot; or 2) purchase of credits equivalent to the lost habitat at an appropriate mitigation bank. As this species is currently a federal candidate species which is anticipated to be listed under the ESA, the project proponent may seek a Biological Opinion for this species in anticipation of it being listed. Once the species is federally listed under the ESA, a Biological Opinion would be required for any impacts to the western spadefoot. **Significance after Mitigation: Less-than-Significant Impact.**

TABLE ES-1 (CONT'D)
SUMMARY OF IMPACTS AND MITIGATION MEASURES

POTENTIAL IMPACT	MITIGATION MEASURE (MM)
4.4. BIOLOGICAL RESOURCES (CONT'D)	
BIO-7. Impacts to Blunt-Nosed Leopard Lizard	
VCIP Energy Resource and Infrastructure Plans. Implementation of the VCIP Energy Resource and Infrastructure Plans could result in potentially substantial adverse impacts to the blunt-nosed leopard lizard, a federal and state listed endangered species. **(*Less-than-Significant Impact with Mitigation*)**	**MM BIO-7: Protection of Blunt-Nosed Leopard Lizard** To avoid mortality of the blunt-nosed leopard lizard due to VCIP implementation, the following mitigation measures are applicable at the project-specific level: a) Species-Specific Surveys. Species-specific surveys for blunt-nosed leopard lizard are required for projects planned within open/natural lands located west of I-5. Protocol-level surveys in suitable habitat for the blunt-nosed leopard lizard by qualified biologists shall be completed following CDFW's *Revised Approved Survey Methodology for the Blunt-nosed Leopard Lizard* (2019) or its most recent guidelines to determine the presence or absence of blunt-nosed leopard lizard prior to the start of ground disturbing activities. This protocol requires a minimum of two surveyors and includes 12 days of adult surveys between April 15 and July 15 with a maximum of four survey days per week and eight survey days within any 30-day period; at least one survey session should be conducted for four consecutive days. Additionally, five juvenile surveys are required between August 15-September 30, with at least two survey days between August 15-30 and at least two survey days between September 15-30. If the surveys detect the presence of blunt-nosed leopard lizards on the project site, then avoidance and compensation measures are required, as specified in MM BIO-7b. If the surveys fail to detect blunt-nosed leopard lizards on the project site, then no further action is required. b) Avoidance and Compensation. If a blunt-nosed leopard lizard is identified during surveys within or immediately adjacent to an area subject to ground disturbing activities, the project should be redesigned to avoid the area where blunt-nosed leopard lizards occur. If the project cannot avoid occupied habitat, the project proponent shall obtain a take permit and follow avoidance, minimization and possibly compensation measures specified in the permit. A take permit from the USFWS (likely under Section 10 of ESA) and ITP from CDFW (2081 Application under CESA) would likely be required. The project proponent would be required to develop procedures to avoid and minimize take, while compensating for lost habitat at a minimum of a 3:1 (compensation-to-impact) ratio. This compensation could occur either on- or off-site and would need to preserve lands via a conservation easement or some other legal instrument which protects and manages the land in perpetuity. The project proponent would be required to identify the area for preservation, develop a Long-Term Management Plan (LTMP) that maintains the conservation value of the land, and provide adequate funding based on the strategies of the LTMP. **Significance after Mitigation: Less-than-Significant Impact.**

TABLE ES-1 (CONT'D)
SUMMARY OF IMPACTS AND MITIGATION MEASURES

POTENTIAL IMPACT	MITIGATION MEASURE (MM)
4.4. BIOLOGICAL RESOURCES (CONT'D)	
BIO-8. Impacts to Swainson's Hawks	
VCIP Energy Resource and Infrastructure Plans. Implementation of the VCIP Energy Resource and Infrastructure Plans could result in potentially substantial adverse impacts to the Swainson's hawk, a state listed threatened species. **(*Less-than-Significant Impact with Mitigation*)**	**MM BIO-8: Protection of Swainson's hawk** To reduce the potential impacts to Swainson's hawks due to VCIP implementation, the following mitigation measures are applicable at the project-specific level: a) Pre-construction Surveys for Swainson's Hawk. During the nesting season prior to the construction on the project site within a half mile of a potential nest tree, preconstruction surveys shall be conducted within the construction zones and adjacent lands to identify any nesting pairs of Swainson's hawks. These surveys shall conform to the guidelines of CDFW as presented in *RECOMMENDED TIMING AND METHODOLOGY FOR SWAINSON'S HAWK NESTING SURVEYS IN CALIFORNIA'S CENTRAL VALLEY,* Swainson's Hawk Technical Advisory Committee, May 31, 2000 and any updates to these guidelines. Pre-construction surveys are not required for construction zones located farther than a half mile from a potential nest tree. b) Nest Avoidance Measures. If an active nest is found within one-half mile of a planned construction zone, a qualified biologist shall establish a suitable construction-free buffer around the nest. The biologist shall establish the buffer based on topography, nature of construction work, distance to the nest tree, and individual behavior of the nesting pair and young, if they are present. This buffer shall be identified on the ground with flagging or fencing and shall be maintained until the biologist has determined the young have fledged. If it is necessary to undertake construction work within the established buffer, a qualified biologist familiar with the active nest should establish a record of "regular" behavior of the nesting pair, and then establish an exclusion zone based on the tolerance of the nesting pair to construction activity in the vicinity of the nest. The qualified biologist shall conduct monitoring of the nest whenever work is planned to occur within the buffer. If a change in behavior from the previously observed "regular" behavior occurs, the qualified biologist shall increase the size of the exclusion zone or reestablish the original standard buffer. [*Continued on next page*.]

TABLE ES-1 (CONT'D)
SUMMARY OF IMPACTS AND MITIGATION MEASURES

POTENTIAL IMPACT	MITIGATION MEASURE (MM)
4.4. BIOLOGICAL RESOURCES (CONT'D)	
BIO-8. Impacts to Swainson's Hawks (Cont'd)	
VCIP Energy Resource and Infrastructure Plans. (Cont'd)	[*Continued from preceding page*.] c) Mitigation for Loss of Breeding Habitat. If it is determined that a Swainson's hawk nest tree(s) is located on or near the individual project site (within 0.5 mile) and was used by a nesting pair within the previous 5 years, the qualified biologist shall coordinate with the project proponent to determine whether the nest tree(s) is planned to be directly impacted (removed) or if the nest tree is planned to be preserved such that potential impacts to the nesting Swainson's hawks would only occur during nesting season. If the nest tree(s) is not planned to be permanently impacted, the project shall include establishment of a permanent buffer zone(s) of adequate size around nest tree location(s). The buffer zone shall require adequate management for the life of the project to ensure the buffer area remains suitable for Swainson's hawks. Annual monitoring of the suitability of management activities may be required by CDFW. If the project will impact a nest tree, avoidance and minimization measures shall be implemented during the nesting season, as specified in MM BIO-3b and MM BIO-3c above, and an off-site conservation easement shall be required as described below. If removal of a nest tree is planned to occur within the nesting season prior to active nesting, a temporary nest structure shall be established within 0.5 mile of the tree to be removed and shall remain in place throughout the nesting season The potential impact to nest trees shall be compensated for through a conservation easement or through purchase of credits at a conservation bank for Swainson's hawk breeding habitat (nest trees and associated foraging habitat). The conservation easement shall be established at a 1:1 ratio for foraging/breeding habitat preservation. The easement shall include habitats determined to be suitable for foraging and/or breeding year-round and seasonal use. The easement must include a tree of suitable nesting type and size as well as additional plantings for new potential nest trees. d) Tailgate Training for Workers. Construction workers on all VCIP projects shall attend a tailgate training session conducted by a qualified biologist. The training shall include a description of the species, a brief summary of its biology and minimization measures and instructions on what to do if a Swainson's hawk is observed on or near the construction site. **Significance after Mitigation: Less-than-Significant Impact.**

TABLE ES-1 (CONT'D)
SUMMARY OF IMPACTS AND MITIGATION MEASURES

POTENTIAL IMPACT	MITIGATION MEASURE (MM)
4.4. BIOLOGICAL RESOURCES (CONT'D)	
BIO-9. Impacts to Burrowing Owls	
VCIP Energy Resource and Infrastructure Plans. Implementation of the VCIP Energy Resource and Infrastructure Plans could result in the loss of foraging and breeding habitat for burrowing owls, a candidate species for state listing as threatened or endangered. **(*Less-than-Significant Impact with Mitigation*)**	**MM BIO-9: Protection of Burrowing Owls** To avoid or substantially reduce the potential impact to burrowing owls due to VCIP implementation, the following mitigation measures are applicable at the project-specific level: a. Pre-Construction Surveys for Burrowing Owl. Pre-construction surveys for burrowing owls shall be conducted by a qualified biologist no more than 14 days in advance of the on-set of ground-disturbing activity at the project site. These surveys shall be conducted according to methods described in the *Staff Report on Burrowing Owl Mitigation* (CDFG 2012) or the most recent CDFW guidelines. The surveys shall cover all areas of suitable burrowing owl habitat within the project site. b. Avoidance of Active Burrowing Owl Nests During Breeding Season. If pre-construction surveys are undertaken during the breeding season (February through August) and active nest burrows are located within or near construction or decommissioning zones, a construction-free buffer of 250 feet shall be established around all active owl nests. These buffer zones shall be enclosed with temporary fencing, and construction equipment and workers shall not be allowed to enter the enclosed setback areas. The buffer zones shall remain in place for the duration of the breeding season. c. Avoidance of Occupied Burrows During Non-Breeding Season, and Passive Relocation of Burrowing Owls. During the non-breeding season (September through January), any burrows occupied by resident owls in areas planned for construction or decommissioning disturbance shall be protected by a construction-free buffer with a radius of 150-250 feet around each burrow, with the required buffer distance to be determined in each case by a qualified biologist. Passive relocation of resident owls is not recommended by CDFW where it can be avoided. Given recent change in the burrowing owl's status to a state candidate species for listing, an ITP would likely be required to conduct passive relocation. d. Mitigation for Loss of Burrowing Owl Habitat. If it is determined that burrowing owl nest(s) are located on or near the individual project site, the qualified biologist shall coordinate with the project proponent to determine whether these nest(s) are to be impacted or if they are planned to be avoided. If the on-site or nearby nests are to remain in place, the biologist shall determine whether sufficient foraging habitat will be available on adjacent or nearby lands after project completion, and if so, no further mitigation is required. (Approximately 200 acres of year-round foraging habitat within about 2 miles of the burrowing owl burrow is required to support a burrowing owl pair.) [*Continued on next page*.]

TABLE ES-1 (CONT'D)

SUMMARY OF IMPACTS AND MITIGATION MEASURES

POTENTIAL IMPACT	MITIGATION MEASURE (MM)
4.4. BIOLOGICAL RESOURCES (CONT'D)	
BIO-9. Impacts to Burrowing Owls (Cont'd)	
VCIP Energy Resource and Infrastructure Plans. (Cont'd)	[*Continued from preceding page*.] If it is determined that insufficient nearby foraging habitat would be available after project completion, the biologist shall determine the amount of off-site (or on-site) foraging habitat that would be required to sustain the burrowing owl pair. The potential impact to foraging habitat shall be either avoided through implementation of measure #1 below (onsite buffer zone), or compensated through implementation of measure #2 (conservation easement), or measure #3 (long-term agreement on adjacent lands), as set forth below: 1) Establishment on the project site of a permanent buffer zone(s) of adequate size around current burrowing owl locations, such that the total acreage of onsite (potentially combined with adjacent offsite) habitat is sufficient to support the resident burrowing owls. These buffer zones shall require adequate management for the life of the project to ensure the buffer area remains suitable for burrowing owls. Annual monitoring of management activities may be required by CDFW; or 2) Establishment of an off-site conservation easement for foraging/breeding habitat preservation, with the lands covered by the easement containing sufficient acreage to support the impacted burrowing owls. The easement shall include habitats determined to be suitable for foraging and/or breeding year-round and seasonal use; or 3) Short or long-term compensation for foraging habitat by providing farmers on adjacent lands incentives to plant particular crops known to be suitable foraging habitat for burrowing owls (i.e., winter wheat, alfalfa, etc.) and to enact a farmer burrowing owl safety program where farmers are trained in how to reduce burrowing owl mortalities on their lands and farm roads. e. Tailgate Training for Workers. Construction workers on all VCIP projects shall attend a tailgate training session conducted by a qualified biologist. The training shall include a description of the species, a brief summary of its biology and minimization measures and instructions on what to do if a burrowing owl is observed on or near the construction site. **Significance after Mitigation: Less-than-Significant Impact.**

TABLE ES-1 (CONT'D)
SUMMARY OF IMPACTS AND MITIGATION MEASURES

POTENTIAL IMPACT	MITIGATION MEASURE (MM)
4.4. BIOLOGICAL RESOURCES (CONT'D)	
BIO-10. Impacts to Pallid Bat, Western Mastiff Bat, and other	**Bat Species**
VCIP Energy Resource and Infrastructure Plans. Implementation of the VCIP Energy Resource and Infrastructure Plans could result in potentially substantial adverse impacts to the pallid bat and western mastiff bat, both state species of special concern, and other bat species. **(*Less-than-Significant Impact with Mitigation*)**	**MM BIO-10: Protection of Bat Species** To avoid harm or mortality to bats due to VCIP implementation, the following mitigation measures are applicable at the project-specific level: a) Initial Surveys. The initial biological surveys required for the project under project MM BIO-1 shall identify if trees or buildings are on the project site. If no trees or buildings are present on the site, no further surveys or mitigation for bats is required. If trees or buildings are present on the project site, the following measures would apply. b) Daytime Habitat Assessment/Humane Eviction. A daytime bat assessment/survey shall be conducted prior to removal of any intact trees or buildings on the project site. If a non-breeding bat colony is observed, the individuals shall be humanely evicted via two-step removal process under the direction of a qualified biologist to ensure that no harm or "take" would occur to any bats as a result of building or intact tree removal activities. c) Minimization. If a maternity colony is detected, then a construction-free buffer zone shall be established around the applicable building or tree and remain in place until the nursery is no longer active. Removal of the building or tree should be conducted between March 1 and April 15 or between August 15 and October 15 to avoid interfering with an active nursery. **Significance after Mitigation: Less-than-Significant Impact.**
BIO-11. Impacts to Burrowing Mammals Including the San Joaquin Antelope Squirrel (SJAS), Short-Nosed Kangaroo Rat, and Giant Kangaroo Rat	
VCIP Energy Resource and Infrastructure Plans. Implementation of the VCIP Energy Resource and Infrastructure Plans could result in potentially substantial adverse impacts to protected burrowing mammal species. **(*Less-than-Significant Impact with Mitigation*)**	**MM BIO-11: Protection of Protected Burrowing Mammal Species** To avoid harm or mortality to protected burrowing mammal species due to VCIP implementation, the following mitigation measures are applicable at the project-specific level: a) Preliminary Surveys/Actions. Preliminary daytime surveys shall be conducted to identify SJAS during their active season (April 1-September 30) in daylight hours between 20 and 30 degrees Celsius (68-86 degrees Fahrenheit). [*Continued on next page*.]

TABLE ES-1 (CONT'D)
SUMMARY OF IMPACTS AND MITIGATION MEASURES

POTENTIAL IMPACT	MITIGATION MEASURE (MM)
4.4. BIOLOGICAL RESOURCES (CONT'D)	
BIO-11. Impacts to Burrowing Mammals Including the San Kangaroo Rat)	**Joaquin Antelope Squirrel (SJAS), Short-Nosed Kangaroo Rat, and Giant**
VCIP Energy Resource and Infrastructure Plans. (Cont'd)	[*Continued from preceding page*.] During these surveys, if kangaroo rat burrows are identified, live trapping by a qualified biologist may be required to ascertain presence or absence of the giant and short-nosed kangaroo rats, since both species can occupy kangaroo rat burrows. If preliminary surveys identify the project as supporting potentially suitable habitat for any of these species, the qualified biologist shall identify avoidable burrows within a particular work area. Any avoidable burrows shall be avoided as discussed below. Should preliminary surveys identify that there are unavoidable burrows within a particular work area, protocol-level surveys for the SJAS, giant kangaroo rat, and short-nosed kangaroo rat shall be conducted before starting construction activities in that work area. b) Pre-construction Surveys. During the preconstruction surveys for other species, if burrows are identified that were not previously identified during the preliminary surveys, a qualified biologist shall flag burrows within the project site and any off-highway access driveways for the project, and any other work areas within the open/natural lands. If preliminary surveys and pre-construction surveys fail to detect burrows, then no further action is required. c) Avoidance and Compensation. If burrows are identified during preconstruction surveys within or immediately adjacent to an area subject to project activity, a disturbance-free buffer zone of at least 10 meters shall be established for each burrow. If active burrows cannot be avoided, it may be necessary to obtain an ITP, under which suitable habitat may be required to be preserved either on- or off-site. **Significance after Mitigation: Less-than-Significant Impact.**
BIO-12. Impacts to San Joaquin Kit Fox	
VCIP Energy Resource and Infrastructure Plans. Implementation of the VCIP Energy Resource and Infrastructure Plans could result in potentially substantial adverse impacts to the San Joaquin kit fox (SJKF), a federally listed endangered species. **(*Less-than-Significant Impact with Mitigation*)**	**MM BIO-12: Protection of San Joaquin Kit Fox** To avoid harm or mortality to San Joaquin kit fox due to VCIP implementation, the following mitigation measures are applicable at the project-specific level: [*Continued on next page*.]

TABLE ES-1 (CONT'D)

SUMMARY OF IMPACTS AND MITIGATION MEASURES

POTENTIAL IMPACT	MITIGATION MEASURE (MM)
4.4. BIOLOGICAL RESOURCES (CONT'D)	
BIO-12. Impacts to San Joaquin Kit Fox (Cont'd)	
VCIP Energy Resource and Infrastructure Plans. (Cont'd)	[*Continued from preceding page*.] a) Pre-Construction Surveys for Kit Fox. Pre-construction surveys for the SJKF shall be conducted by a qualified biologist no less than 14 days and no more than 30 days prior to the beginning of ground disturbance, construction or decommissioning activities, or any other activities likely to impact the SJKF. These surveys shall be conducted in accordance with the "*U.S. Fish and Wildlife Service Standardized Recommendations for Protection of the Endangered San Joaquin Kit Fox Prior To or During Ground Disturbance*" (USFWS 2011) which are set forth in full in Table BIO-1 or the most recent USFWS guidelines. The primary objective of these recommendations is to identify kit fox habitat features (e.g., potential dens and refugia) on the project site and evaluate their use by kit foxes. If an active kit fox den is detected within or immediately adjacent to the area of work, the USFWS shall be contacted immediately to determine the best course of action. b) Kit Fox Avoidance Measures. Should kit fox be found to be using the project site during pre-construction surveys, the project shall avoid the habitat occupied by kit fox and the Sacramento Field Office of the USFWS and the Fresno Field Office of CDFW shall be notified. c) Tailgate Training for Workers. All workers on the project shall attend a tailgate training session conducted by a qualified biologist. The training shall include a description of the species, a brief summary of their biology, and minimization measures and instructions on what to do if a SJKF is observed on the project site. d) Minimization of Potential Disturbance to Kit Fox. Whether or not kit foxes are found to be present, all permanent and temporary construction activities, decommissioning activities, and other types of project-related activities shall be carried out in a manner that minimizes potential disturbance to kit foxes. This shall be accomplished through implementation of the protection measures set forth in USFWS's standard recommendations provided above and set forth in full in Table BIO-1. [*Continued on next page*.]

TABLE ES-1 (CONT'D)
SUMMARY OF IMPACTS AND MITIGATION MEASURES

POTENTIAL IMPACT	MITIGATION MEASURE (MM)
4.4. BIOLOGICAL RESOURCES (CONT'D)	
BIO-12. Impacts to San Joaquin Kit Fox (Cont'd)	
VCIP Energy Resource and Infrastructure Plans. (Cont'd)	[*Continued from preceding page*.] e) Mortality Reporting. The Sacramento Field Office of the USFWS and the Fresno Field Office of CDFW shall be notified in writing within three working days in case of the accidental death or injury to a SJKF during project-related activities. 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. f) Minimization. If active dens are identified during pre-activity surveys within or immediately adjacent to an area subject to project activity, a disturbance-free buffer zone of at least 300 feet shall be established around the active den. This buffer shall be maintained until the young have moved on from the den. Once the den has been confirmed to be inactive by a qualified biologist, it shall be excavated, then collapsed. If active burrows cannot be avoided, an ITP may be required. g) Wildlife-friendly Fencing. The perimeter fencing surrounding each phase of the project shall consist of wildlife-friendly or permeable fencing that allows SJKF and other wildlife to move through the site unimpeded. The bottom of the perimeter fencing shall be 5 to 7 inches above the ground, as measured from the top of the ground to the lowest point of the fence. The bottom of the fence edges shall be knuckled (wrapped back to form a smooth edge) to allow wildlife to pass through safely. The fencing shall not be electrified. **Significance after Mitigation: Less-than-Significant Impact.**

Table BIO-1

U.S. FISH AND WILDLIFE SERVICE STANDARDIZED RECOMMENDATIONS FOR PROTECTION OF THE ENDANGERED SAN JOAQUIN KIT FOX PRIOR TO OR DURING GROUND DISTURBANCE

CONSTRUCTION AND ON-GOING OPERATIONAL REQUIREMENTS

1. Project-related vehicles should observe a daytime speed limit of 20-mph throughout the site in all project areas, except on county roads and State and Federal highways; this is particularly important at night when kit foxes are most active. Night-time construction should be minimized to the extent possible. However if it does occur, then the speed limit should be reduced to 10-mph. Off-road traffic outside of designated project areas should be prohibited.
2. To prevent inadvertent entrapment of kit foxes or other animals during the construction phase of a project, all excavated, steep-walled holes or trenches more than 2-feet deep should be covered at the close of each working day by plywood or similar materials. If the trenches cannot be closed, one or more escape ramps constructed of earthen-fill or wooden planks shall be installed. Before such holes or trenches are filled, they should be thoroughly inspected for trapped animals. If at any time a trapped or injured kit fox is discovered, the Service and the California Department of Fish and Wildlife (CDFW) shall be contacted as noted under measure 13 referenced below.
3. Kit foxes are attracted to den-like structures such as pipes and may enter stored pipes and become trapped or injured. All construction pipes, culverts, or similar structures with a diameter of 4-inches or greater that are stored at a construction site for one or more overnight periods should be thoroughly inspected for kit foxes before the pipe is subsequently buried, capped, or otherwise used or moved in any way. If a kit fox is discovered inside a pipe, that section of pipe should not be moved until the USFWS has been consulted. If necessary, and under the direct supervision of the biologist, the pipe may be moved only once to remove it from the path of construction activity, until the fox has escaped.
4. All food-related trash items such as wrappers, cans, bottles, and food scraps should be disposed of in securely closed containers and removed at least once a week from a construction or project site.
5. No firearms shall be allowed on the project site. (This prohibition does not apply to law enforcement personnel such as Sheriff's Deputies or the Fire Marshal.)
6. No pets, such as dogs or cats, should be permitted on the project site to prevent harassment, mortality of kit foxes, or destruction of dens.
7. Use of rodenticides and herbicides in project areas should be restricted. This is necessary to prevent primary or secondary poisoning of kit foxes and the depletion of prey populations on which they depend. All uses of such compounds should observe label and other restrictions mandated by the U.S. Environmental Protection Agency, California Department of Food and Agriculture, and other State and Federal legislation, as well as additional project-related restrictions deemed necessary by the USFWS. If rodent control must be conducted, zinc phosphide should be used because of a proven lower risk to kit fox. A representative shall be appointed by the project proponent who will be the contact source for any employee or contractor who might inadvertently kill or injure a kit fox or who finds a dead, injured or entrapped kit fox. The representative will be identified during the employee education program and their name and telephone number shall be provided to the USFWS.
8. A representative shall be appointed by the project proponent who will be the contact source for any employee or contractor who might inadvertently kill or injure a kit fox or who finds a dead, injured or entrapped kit fox. The representative will be identified during the employee education program and their name and telephone number shall be provided to the USFWS. (*Continued on next page*.)

Table BIO-1 (Cont'd)

U.S. FISH AND WILDLIFE SERVICE STANDARDIZED RECOMMENDATIONS
FOR PROTECTION OF THE ENDANGERED SAN JOAQUIN KIT FOX PRIOR TO OR DURING GROUND DISTURBANCE

CONSTRUCTION AND ON-GOING OPERATIONAL REQUIREMENTS

9. An employee education program should be conducted for any project that has anticipated impacts to kit fox or other endangered species. The program should consist of a brief presentation by persons knowledgeable in kit fox biology and legislative protection to explain endangered species concerns to contractors, their employees, and military and/or agency personnel involved in the project. The program should include the following: A description of the San Joaquin kit fox and its habitat needs; a report of the occurrence of kit fox in the project area; an explanation of the status of the species and its protection under the Endangered Species Act; and a list of measures being taken to reduce impacts to the species during project construction and implementation. A fact sheet conveying this information should be prepared for distribution to the previously referenced people and anyone else who may enter the project site.
10. Upon completion of the project, all areas subject to temporary ground disturbances, including storage and staging areas, temporary roads, pipeline corridors, etc., should be re-contoured if necessary, and revegetated to promote restoration of the area to pre-project conditions. An area subject to "temporary" disturbance means any area that is disturbed during the project, but after project completion will not be subject to further disturbance and has the potential to be revegetated. Appropriate methods and plant species used to revegetate such areas should be determined on a site-specific basis in consultation with the USFWS, California Department of Fish and Wildlife (CDFW), and revegetation experts.
11. In the case of trapped animals, escape ramps or structures should be installed immediately to allow the animal(s) to escape, or the USFWS should be contacted for guidance.
12. Any contractor, employee, or military or agency personnel who are responsible for inadvertently killing or injuring a San Joaquin kit fox shall immediately report the incident to their representative. This representative shall contact the CDFW immediately in the case of a dead, injured or entrapped kit fox. The CDFW contact for immediate assistance is State Dispatch at (916) 445-0045. They will contact the local warden or Mr. Paul Hoffman, the wildlife biologist, at (530) 934-9309. The USFWS should be contacted at the numbers below.
13. The Sacramento Fish and Wildlife Office and CDFW shall be notified in writing within three working days of the accidental death or injury to a San Joaquin kit fox during project related activities. Notification must include the date, time, and location of the incident or of the finding of a dead or injured animal and any other pertinent information. The USFWS contact is the Chief of the Division of Endangered Species, at the addresses and telephone numbers below. The CDFW contact is Mr. Paul Hoffman at 1701 Nimbus Road, Suite A, Rancho Cordova, California 95670, (530) 934-9309.
14. New sightings of kit fox shall be reported to the California Natural Diversity Database (CNDDB). A copy of the reporting form and a topographic map clearly marked with the location of where the kit fox was observed should also be provided to the Service at the address below.

Any project-related information required by the Service or questions concerning the above conditions or their implementation may be directed in writing to the U.S. Fish and Wildlife Service at:

Endangered Species Division
2800 Cottage Way, Suite W2605
Sacramento, California 95825-1846
(916) 414-6620 or (916) 414-6600

TABLE ES-1 (CONT'D)
SUMMARY OF IMPACTS AND MITIGATION MEASURES

POTENTIAL IMPACT	MITIGATION MEASURE (MM)
4.4. BIOLOGICAL RESOURCES (CONT'D)	
BIO-13. Impacts to American Badger	
VCIP Energy Resource and Infrastructure Plans. Implementation of the VCIP Energy Resource and Infrastructure Plans could result in potentially adverse impacts to the American badger, a California Species of Special Concern. **(*Less-than-Significant Impact with Mitigation*)**	**MM BIO-13: Protection of American Badger** To avoid harm or mortality to San Joaquin kit fox due to VCIP implementation, the following mitigation measures are applicable at the project-specific level: a. Pre-construction Surveys for American Badger. During the course of pre-construction surveys prescribed for other species, a qualified biologist shall also determine the presence or absence of badgers prior to the start of each individual project. If badgers are found to be absent, a report shall be written to the project proponent so stating and no other mitigations for the protection of badgers would be required. b. Avoidance of Active Badger Dens and Monitoring. If an active badger den is identified during pre-construction surveys within or immediately adjacent to an area subject to construction or decommissioning, a construction-free buffer of up to 300 feet shall be established around the den. Once the qualified biologist has determined that badgers have vacated the burrow, the burrow shall be collapsed or excavated, and ground disturbance can proceed. Should the burrow be determined to be a natal or reproductive den, and because badgers are known to use multiple burrows in a breeding burrow complex, a biological monitor shall be present onsite during construction activities in the vicinity of the burrows to ensure the buffer is adequate to avoid direct impact to individuals or natal/reproductive den abandonment. The monitor shall be required to be present onsite until it is determined that young are of an independent age and construction or decommissioning activities would not harm individual badgers. Once the den has been confirmed to be inactive by the qualified biologist, it may be excavated, then collapsed. c. Tailgate Training for Workers. Construction workers on all VCIP projects shall attend a tailgate training session conducted by a qualified biologist. The training shall include a description of the species, a brief summary of their biology, and minimization measures and instructions on what to do if an American badger is observed on the project site. **Significance after Mitigation: Less-than-Significant Impact.**

TABLE ES-1 (CONT'D)

SUMMARY OF IMPACTS AND MITIGATION MEASURES

POTENTIAL IMPACT	MITIGATION MEASURE (MM)
4.4. BIOLOGICAL RESOURCES (CONT'D)	
BIO-14. Impacts to Wildlife Movement Corridors	
VCIP Energy Resource and Infrastructure Plans. Implementation of the VCIP Energy Resource and Infrastructure Plans would not interfere with the home range and dispersal movements of native wildlife. **(*Less-than-Significant Impact*)**	**No mitigation is required.**
BIO-15. Potential Hazards to Avian Species	
VCIP Energy Resource and Infrastructure Plans. Implementation of the VCIP Energy Resource and Infrastructure Plans could result in potential hazards to avian species due to night lighting, lake effect, collision, and electrocution. **(*Less-than-Significant Impact with Mitigation*)**	**MM BIO-14: Protection of Avian Species from Risk of Collision and Electrocution** To avoid harm or mortality to avian species due to risk of collision with solar arrays, and risk of collision and electrocution at transmission lines, the following mitigation measures are applicable at the project-specific level: a. Reduce Potential for Bird Collisions with Solar Arrays. At the end of each day, the solar panels shall be set at a near vertical position to avoid a horizontal resting position which may attract birds which could mistake the arrays for water surfaces. b. Reduce Potential for Bird Collisions and Electrocutions with Power Lines. To minimize the potential for bird collisions and electrocutions with power lines, the VCIP gen-tie and transmission lines shall be designed, constructed, and maintained in accordance with the following APLIC guidelines: *Reducing Avian Collisions with Power Lines: The State of the Art in 2012* (APLIC 2012) and *Suggested Practices for Avian Protection on Power Lines: The State of the Art in 2006* (APLIC 2006). **Significance after Mitigation: Less-than-Significant Impact.**
BIO-16. Impacts to Jurisdictional Waters and Riparian Habitats	
VCIP Energy Resource and Infrastructure Plans. Implementation of the VCIP Energy Resource and Infrastructure Plans could result in potentially adverse impacts to jurisdictional waters and riparian habitats. **(*Less-than-Significant Impact with Mitigation*)**	**MM BIO-15: Jurisdictional Waters and Riparian Habitat** If a proposed VCIP project includes plans to place fill or structures within a wetland, jurisdictional water, or riparian habitat, the following mitigation measures are applicable at the project-specific level to ensure consistency with applicable "no net loss" policies: [*Continued on next page*.]

TABLE ES-1 (CONT'D)
SUMMARY OF IMPACTS AND MITIGATION MEASURES

POTENTIAL IMPACT	MITIGATION MEASURE (MM)
4.4. BIOLOGICAL RESOURCES (CONT'D)	
BIO-16. Impacts to Waters of the U.S. and Riparian Habitats	**(Cont'd)**
VCIP Energy Resource and Infrastructure Plans. (Cont'd*)*	[*Continued from preceding page*.] a. Minimization of Impact. If a proposed VCIP project includes plans to fill a Water of the U.S., and/or a Water of the State, the project shall be designed to minimize impacts to such Waters to the maximum extent practicable. b. Compensatory Mitigation. If avoidance is not practicable, compensation for the loss of Waters of the U.S. and/or Waters of the State may be required unless a waiver is granted. This may be accomplished by purchasing in-kind credits at an approved mitigation bank, payment into an established in-lieu fund, or through the preservation of onsite or offsite lands with similar hydrologic features. Any preservation lands would be placed under conservation easement held by a third party and managed in perpetuity with an agency approved endowment fund. c. Creation of New Wetlands. As an alternative to Mitigation Measure BIO-16b, a project proponent may compensate for the loss of Waters of the U.S. and/or State through the creation of in-kind waters at a ratio determined by the USACE and/or RWQCB on preserved lands, onsite or offsite, which have characteristics necessary for creation of similar hydrologic features. Such created wetland would be placed under conservation easement held by a third party and managed in perpetuity with an agency approved endowment fund. d. Employee Education Program. During the construction phases of the project, a qualified biologist shall conduct an environmental awareness program for all construction and onsite personnel. Training shall include a discussion of avoidance and minimization measures being implemented to protect biological resources (including jurisdictional Waters and wetlands) as well as terms and conditions of the permits. **Significance after Mitigation: Less-than-Significant Impact.**
BIO-17. Local Policies or Ordinances Protecting Biological	**Resources**
VCIP Energy Resource and Infrastructure Plans. Implementation of the VCIP Energy Resource and Infrastructure Plans would not conflict with local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance. **(*Less-than-Significant Impact*)**	**No mitigation is required.**

TABLE ES-1 (CONT'D)
SUMMARY OF IMPACTS AND MITIGATION MEASURES

POTENTIAL IMPACT	MITIGATION MEASURE (MM)
4.4. BIOLOGICAL RESOURCES (CONT'D)	
BIO-18. Habitat Conservation Plans	
VCIP Energy Resource and Infrastructure Plans. Implementation of the VCIP Energy Resource and Infrastructure Plan would not conflict with adopted habitat conservation plans or other approved local, regional or state habitat conservation plans. **(*Less-than-Significant Impact*)**	**Implement MM BIO-1, BIO-2, BIO-7, BIO-11, and BIO-12.**
4.5. CULTURAL AND TRIBAL CULTURAL RESOURCES	
CUL-1. Disturbance to Cultural Resources	
VCIP Energy Resource and Infrastructure Plans. Implementation of the VCIP Energy Resource and Infrastructure Plans could have potentially adverse impacts on historical and prehistoric archaeological resources (cultural resources) which may be present within the Plan Area. **(*Less-than-Significant Impact with Mitigation*)**	**MM CUL-1: Protection of Cultural Resources** To reduce potential impacts to cultural resources from VCIP implementation, the following mitigation measures are applicable at the project-specific level. The lands subject to development under VCIP are classified into five archaeological sensitivity zones as mapped on the Archaeological Sensitivity Maps prepared for the VCIP PEIR. The mitigation measures applicable to the five zones are separated into three groups, as follows: a) Measures applicable to all VCIP development; b) Measures applicable to lands with Highest/High/Moderate sensitivity (which are grouped together because these categories represent a continuum); and c) Measures applicable to lands with Low/Lowest sensitivity. a) Measures Applicable to All VCIP Development i) Retain Qualified Archeologist and Conduct Archaeological Review. During the project-level environmental review process under CEQA, the project proponent shall retain a professional archaeologist consultant meeting the Secretary of the Interior's Standards and having expertise in California prehistoric and historical archaeology (the Qualified Archaeologist). The Qualified Archeologist shall complete a due diligence archaeological review of the project site which shall include at a minimum: (1) an archival records search by the California Historical Resources Information System, Southern San Joaquin Valley Information Center, California State University Bakersfield (CHRIS/SSJVIC) for a 0.25 mile radius around the project site boundaries; (2) a review of historic sources and maps of the project site to determine historic sensitivity; and, (3) the results of a Sacred Lands File (SLF) by the NAHC. The results shall be reported in a Memorandum to File with appropriate graphics and any supporting documents. [*Continued on next page.*]

TABLE ES-1 (CONT'D)
SUMMARY OF IMPACTS AND MITIGATION MEASURES

POTENTIAL IMPACT	MITIGATION MEASURE (MM)
4.5. CULTURAL AND TRIBAL CULTURAL RESOURCES (CONT'D)	
CUL-1. Disturbance to Cultural Resources (Cont'd)	
VCIP Energy Resource and Infrastructure Plans. (Cont'd)	[*Continued from preceding page*.] ii) Cultural Resources Notice on Construction Plans. The project proponent shall note on any plans that require ground disturbing excavation that there is potential for exposing buried cultural resources, including prehistoric Native American ancestral remains. Any archival archaeological site information supplied to the construction contractor shall be considered confidential. iii) Worker Education and Awareness Program (WEAP) Training. Prior to the issuance of building permits for each VCIP project, the Qualified Archeologist shall provide a cultural resources and tribal cultural resources sensitivity and awareness training program (WEAP) for all personnel involved in ground disturbing project construction, including field consultants and construction workers. If additional construction personnel join the project after the start of construction, additional trainings will be held. Documentation shall be retained demonstrating that all construction personnel attended the training. The WEAP shall be developed by the Qualified Archaeologist in coordination with the Tribal Historic Preservation Officer (THPO) of the Santa Rosa Rancheria Tachi Yokut Tribe. The WEAP shall be conducted before any project-related construction activities begin at the project site. The WEAP shall include relevant information regarding sensitive cultural resources, including applicable regulations, protocols for avoidance, and consequences of violating State laws and regulations. The WEAP shall also describe appropriate avoidance and impact minimization measures for cultural resources that could be located at the project site and shall outline what to do and who to contact if any potential cultural resources are encountered. The WEAP shall emphasize the requirement for confidentiality and culturally appropriate treatment of any discovery of significance. iv) Implement Procedures for Inadvertent Discoveries. The Qualified Archaeologist shall be retained during all ground disturbing activity during construction and decommissioning for the project to provide assistance in the event of any unexpected archaeological discoveries during construction. Should previously unidentified cultural resources be discovered during construction of the project, all ground disturbing activities shall stop within 100 feet of the find, and the appropriate regulatory agency and the Santa Rosa Rancheria Tachi Yokut Tribe shall be notified immediately. The Qualified Archeologist shall assist with the review, identification and evaluation of the cultural resources to determine if they are historical resource(s) and/or unique archaeological resources or tribal cultural resources under CEQA. [*Continued on next page.*]

TABLE ES-1 (CONT'D)
SUMMARY OF IMPACTS AND MITIGATION MEASURES

POTENTIAL IMPACT	MITIGATION MEASURE (MM)
4.5. CULTURAL AND TRIBAL CULTURAL RESOURCES (CONT'D)	
CUL-1. Disturbance to Cultural Resources (Cont'd)	
VCIP Energy Resource and Infrastructure Plans. (Cont'd)	[*Continued from preceding page*.] If the Qualified Archaeologist determines that any cultural resources exposed during construction constitute a historical resource and/or unique archaeological resource or tribal cultural resource under CEQA, he/she shall notify the project proponent and other appropriate parties including the Tribe of the evaluation. The Qualified Archaeologist shall recommend mitigation measures to mitigate to less-than significant any potential impact in accordance with California Public Resources Code Section 15064.5. Tribal cultural resources shall be evaluated in consultation with the Tribal Historic Preservation Officer (THPO) of the Santa Rosa Rancheria Tachi Yokut Tribe. Mitigation measures may include avoidance, preservation in-place, recordation, archaeological and tribal monitoring, archaeological testing and data recovery among other options. Construction within the 50-foot exclusion zone shall only be allowed to commence when mitigation has been completed. The archaeologist shall document the resources using DPR 523 forms and file said forms with the California Historical Resources Information System, Southern San Joaquin Valley Information Center. The resources shall be photo-documented and collected by the archaeologist for submittal to the Santa Rosa Rancheria's Cultural and Historical Preservation Department. The archaeologist shall be required to submit to the appropriate regulatory agency for review and approval a report of the findings and method of curation or protection of the resources. Further grading or site work within the area of discovery shall not be allowed until the preceding steps have been taken. If significant archaeological deposits (or tribal cultural resources) are exposed during ground disturbing construction, a formal *Archaeological Monitoring Plan* (AMP) and/or *Archaeological Treatment Plan* (ATP) that may include data recovery shall be developed and implemented, as recommended by the Qualified Archaeologist. The AMP shall provide that the Santa Rosa Rancheria Tachi Yokut Tribe shall be given the opportunity to provide a Tribal Monitor during ground disturbing activities during both construction and decommissioning, within areas of the project site which have been determined by the Qualified Archaeologist to have a high potential to yield archaeological resources. Tribal participation would be dependent upon the availability and interest of the Santa Rosa Rancheria Tachi Yokut Tribe. The final details of the AMP and/or ATP, and treatment of significant cultural resources and/or tribal cultural resources, shall be determined by the project proponent in consultation with the approving agency and the THPO of the Santa Rosa Rancheria Tachi Yokut Tribe. [*Continued on next page*.]

TABLE ES-1 (CONT'D)

SUMMARY OF IMPACTS AND MITIGATION MEASURES

POTENTIAL IMPACT	MITIGATION MEASURE (MM)
4.5. CULTURAL AND TRIBAL CULTURAL RESOURCES (CONT'D)	
CUL-1. Disturbance to Cultural Resources (Cont'd)	
VCIP Energy Resource and Infrastructure Plans. (Cont'd)	[*Continued from preceding page*.] b) Measures Applicable to VCIP Development in Highest/High/Moderate Sensitivity Areas i) Prepare Archaeological Resources Assessment. The project proponent shall retain the Qualified Archaeologist to complete a formal *Archaeological Resources Assessment* (ARA) of any project site located within Highest/High/Moderate sensitivity areas as mapped on the Prehistoric Cultural Resources Sensitivity Maps prepared for the VCIP PEIR. The ARA shall include: (1) an archival records search by the California Historical Resources Information System, Southern San Joaquin Valley Information Center, California State University Bakersfield (CHRIS/SSJVIC) for a 0.25 mile radius around the project site boundaries; (2) a review of historic sources and maps of the project site to determine historic sensitivity; (3) the results of a Sacred Lands File (SLF) search by the NAHC and any required outreach to local tribes and individuals; (4) a systematic field inventory of the project site with an emphasis on areas identified as highest/high/moderate sensitivity; and, (5) completion of a report with findings/recommendations including general mitigation measures for any development within the VCIP (see MM CUL-1a) as well as any additional site-specific mitigation measures based on the findings of the research and field inventory completed for the ARA. ii) Additional Mitigation Measures. Additional mitigation measures applicable to project sites within the Highest/High/Moderate sensitivity areas include the following: (1) If recommended by the Qualified Archaeologist, undertake completion of a presence/absence archaeological testing program prior to construction to determine the subsurface archaeological sensitivity of the project site and the potential for exposing both prehistoric and historic subsurface cultural materials during future ground disturbing construction. (2) If recommended by the Qualified Archaeologist, conduct archaeological and tribal monitoring of ground disturbing construction of the archaeologically sensitive areas within the project site to a maximum depth of 5 feet below existing grade in accordance with the protocols presented in a site specific AMP (see MM CUL-1a (iv)). The Plan Area is generally within Holocene fan and basin deposits that coincide with the human occupation of central California. Excavations 5 feet or deeper would generally be in older Pleistocene deposits that do not include human occupation of the Plan Area. In the event of an unexpected discovery below 5 feet of the existing ground surface, implement the measures specified in MM CUL-1 (a)(iv). [*Continued on next page*.]

TABLE ES-1 (CONT'D)

SUMMARY OF IMPACTS AND MITIGATION MEASURES

POTENTIAL IMPACT	MITIGATION MEASURE (MM)
4.5. CULTURAL AND TRIBAL CULTURAL RESOURCES	**(CONT'D)**
CUL-1. Disturbance to Cultural Resources (Cont'd)	
VCIP Energy Resource and Infrastructure Plans. (Cont'd)	[*Continued from preceding page*.] If an AMP is required, then it shall be developed and approved by the approving agency prior to the start of construction to avoid delays during construction by allowing immediate implementation of the AMP after an unexpected discovery of significant cultural materials that may require archaeological and tribal monitoring. (3) If recommended by the Qualified Archaeologist, conduct tribal monitoring during decommissioning of the facility in accordance with the approved AMP to a maximum depth of 5 feet below original ground surface. (4) If recommended by the Qualified Archaeologist, develop an ATP with protocols to be implemented in the event that data recovery is the preferred action to recover significant historical or unique archaeological resources (or tribal cultural resources) exposed during ground disturbing construction. If an ATP is required, then it shall be prepared by the Qualified Archaeologist, in consultation with the Tribe and project proponent, and approved by the approving agency prior to the start of construction to avoid delays during construction by allowing immediate implementation of the ATP after an unexpected discovery of cultural materials that may require data recovery. c) Mitigation Measures Applicable to VCIP Development in Low/Lowest Sensitivity Areas. Implement MM CUL-1a. Measures Applicable to All VCIP Development. No additional mitigation for these areas is required. **Significance after Mitigation: Less-than-Significant Impact.**

TABLE ES-1 (CONT'D)
SUMMARY OF IMPACTS AND MITIGATION MEASURES

POTENTIAL IMPACT	MITIGATION MEASURE (MM)
4.5. CULTURAL AND TRIBAL CULTURAL RESOURCES	**(CONT'D)**
CUL-2. Potential Disturbance to Buried Native American	**Ancestral Remains**
VCIP Energy Resource and Infrastructure Plans. Implementation of the VCIP Energy Resource and Infrastructure Plans could have potentially adverse impacts on any buried ancestral remains which may be present within the Plan Area. **(*Less-than-Significant Impact with Mitigation*)**	**MM CUL-2: Protection of Native American Ancestral Remains** To reduce potential impacts to Native American ancestral remains from VCIP implementation, the following mitigation measures are applicable at the project-specific level: a) Pursuant to Health and Safety Code section 7050.5(b) and PRC, section 5097.98, if human bone or bone of unknown origin is found at any time during on- or off-site construction, all work shall stop in the vicinity of the find and the Fresno County Coroner shall be notified immediately. If the remains are determined to be Native American, the Coroner shall notify the NAHC, who shall identify the person believed to be the Most Likely Descendant (MLD). The project proponent and MLD, with the assistance of the Qualified Archaeologist, shall make all reasonable efforts to develop an agreement for the treatment of human remains and associated or unassociated funerary objects with appropriate dignity (CEQA Guidelines, section 15064.5(e)). The agreed upon treatment plan shall address the appropriate excavation, removal, recordation, analysis, custodianship, curation, and final disposition of the human remains and associated or unassociated funerary objects. PRC, section 5097.98(a) allows up to 48 hours for the MLD to make their wishes known to the landowner after being granted access to the site. If the MLD and the other parties do not agree on the reburial method, the project will follow PRC, section 5097.98(e) which states that "the landowner or his or her authorized representative shall reinter the human remains and items associated with Native American human remains with appropriate dignity on the property in a location not subject to further and future subsurface disturbance." b) The treatment plan shall be implemented, and any findings shall be submitted by the Qualified Archaeologist in a professional report to the project proponent, the appropriate regulatory agency, the MLD and the Tachi Yokut Tribe, and the CHRIS/SSJVIC. **Significance after Mitigation: Less-than-Significant-Impact.**
CUL-3. Potential Impacts to Tribal Cultural Resources	
VCIP Energy Resource and Infrastructure Plans. Implementation of the VCIP Energy Resource and Infrastructure Plans could have potentially adverse impacts on any tribal cultural resources which may be present within the Plan Area. **(*Less-than-Significant Impact with Mitigation*)**	**Implement MM CUL-1 (Protection of Cultural Resources) and MM CUL-2 (Protection of Native American Ancestral Remains).** **Significance after Mitigation: Less-than-Significant Impact.**

TABLE ES-1 (CONT'D)
SUMMARY OF IMPACTS AND MITIGATION MEASURES

POTENTIAL IMPACT	MITIGATION MEASURE (MM)
4.6. ENERGY	
EN-1. Wasteful, Inefficient, or Unnecessary Consumption of	**Energy**
VCIP Energy Resource and Infrastructure Plans. Implementation of the VCIP Energy Resource and Infrastructure Plans would not result in potentially significant environmental impacts due to wasteful, inefficient, or unnecessary consumption of energy, during project construction or operation. **(*Less-than-Significant Impact*)**	**No mitigation is required.**
EN-2. Conflict With or Obstruct a State or Local Plan for	**Renewable Energy or Energy Efficiency**
VCIP Energy Resource and Infrastructure Plans. Implementation of the VCIP Energy Resource and Infrastructure Plans would not conflict with or obstruct a state or local plan for renewable energy or energy efficiency. The VCIP would instead advance these plans by facilitating new sources of renewable energy. **(*Less-than-Significant Impact*)**	**No mitigation is required.**
4.7. GEOLOGY, SOILS AND PALEONTOLOGICAL RESOURCES	
GEO-1. Rupture of Known Earthquake Fault	
VCIP Energy Resource and Infrastructure Plans. There are no known active or potentially active earthquake faults in proximity to the VCIP Plan Area; therefore, the potential for impact from fault rupture is extremely low and not reasonably foreseeable. **(*Less-than-Significant Impact*)**	**No mitigation is required.**
GEO-2. Seismic Ground Shaking	
VCIP Energy Resource and Infrastructure Plans. Moderate to strong ground shaking expected within the VCIP Plan Area during a moderate to severe earthquake could result in damage to solar generating facilities, energy storage systems, substation, and transmission and gen-tie lines; however, any potential impacts would be addressed through compliance with existing regulations, standards, and codes. **(*Less-than-Significant Impact*)**	**No mitigation is required.**

TABLE ES-1 (CONT'D)
SUMMARY OF IMPACTS AND MITIGATION MEASURES

POTENTIAL IMPACT	MITIGATION MEASURE (MM)
4.7. GEOLOGY AND SOILS (CONT'D)	
GEO-3. Liquefaction, Lateral Spreading, and Seismic Settlement	
VCIP Energy Resource and Infrastructure Plans. There is potential for seismically-induced liquefaction, lateral spreading, and settlement within the VCIP Plan Area which could result in damage to foundations and structures; however, any potential impacts would be addressed through compliance with existing regulations, codes, and standards. **(*Less-than-Significant Impact*)**	**No mitigation is required.**
GEO-4. Landslide Hazard	
VCIP Energy Resource and Infrastructure Plans. The level terrain of the VCIP Plan Area has very low potential for landslides, and thus there would be no impact from landslide hazards to project construction, operation, or decommissioning. **(*Less-than-Significant Impact*)**	**No mitigation is required.**
GEO-5. Expansive Soils	
VCIP Energy Resource and Infrastructure Plans. Most soil units within the VCIP Plan Area consist of clay soils that have high potential for expansion, which could result in potential damage to foundations and structures; however, any potential impacts would be addressed through compliance with existing regulations, codes, and standards. **(*Less-than-Significant Impact*)**	**No mitigation is required.**
GEO-6. Erosion Potential	
VCIP Energy Resource and Infrastructure Plans. Development of the VCIP energy resource and infrastructure projects could cause water- and wind-related soil erosion during construction and operation of the solar and energy facilities; however, with implementation of erosion control measures specified in the state-mandated Storm Water Pollution Prevention Plans (SWPPPs) for each VCIP project, the potential erosion impacts would be less than significant. **(*Less-than-Significant Impact*)**	**No mitigation is required.**

TABLE ES-1 (CONT'D)
SUMMARY OF IMPACTS AND MITIGATION MEASURES

POTENTIAL IMPACT	MITIGATION MEASURE (MM)
4.7. GEOLOGY AND SOILS (CONT'D)	
GEO-7. Soil Corrosivity	
VCIP Energy Resource and Infrastructure Plans. Corrosive soils within the VCIP Plan Area could cause damage to project structures, foundations, and utilities; however, any potential impacts would be addressed through compliance with existing regulations, codes, and standards. **(*Less-than-Significant Impact*)**	**No mitigation is required.**
GEO-8. Soil Suitability for Wastewater Disposal	
VCIP Energy Resource and Infrastructure Plans. The domestic wastewater disposal requirements for operation of VCIP facilities would be provided by septic tanks and leach fields designed and constructed in accordance with County requirements, ensuring that the soils would be capable of adequately accommodating the effluent generated by the VCIP projects. **(*Less-than-Significant Impact*)**	**No mitigation is required**
GEO-9. Loss of Paleontological Resources	
VCIP Energy Resource and Infrastructure Plans. Construction of VCIP energy resource and infrastructure projects could result in the destruction of paleontological resources. **(*Less-than-Significant Impact with Mitigation*)**	**MM GEO-1: Protection of Paleontological Resources** To avoid potentially significant impacts to paleontological resources from VCIP implementation, the following mitigation measures are applicable at the project-specific level. The lands subject to development under the VCIP are classified as having either high or low paleontological sensitivity. Therefore, the following mitigation measures are separated into three groups, as follows: a) Measures applicable to all VCIP development; b) Measures applicable to lands with high paleontological sensitivity; and c) Measures applicable to lands with low paleontological sensitivity. a) Measures Applicable to All VCIP Development i) Retain Qualified Paleontologist. Prior to initial ground disturbance, the project proponent shall retain a Qualified Paleontologist, defined as a paleontologist who meets the Society of Vertebrate Paleontology's (SVP) standards. ii) Worker Education and Awareness Program (WEAP) Training. Prior to commencement of ground disturbing activities for construction, the Qualified Paleontologist or his or her designee, shall conduct WEAP training for construction personnel regarding the appearance of fossils and the procedures for notifying paleontological staff should fossils be discovered by construction staff. [*Continued on next page.*]

TABLE ES-1 (CONT'D)
SUMMARY OF IMPACTS AND MITIGATION MEASURES

POTENTIAL IMPACT	MITIGATION MEASURE (MM)
3.7. GEOLOGY AND SOILS (CONT'D)	
GEO-9. Loss of Paleontological Resources (Cont'd)	
VCIP Energy Resource and Infrastructure Plans (Cont'd).	[*Continued from preceding page*.] iii) Unexpected Fossil Discovery. In the event of a fossil discovery by construction personnel, all work within 50 feet of the find (the "exclusion zone") shall cease, and the Qualified Paleontologist shall be contacted to evaluate the significance of the resource and make recommendations for the treatment, recovery, and curation of the resource, as appropriate. Work within the exclusion zone shall not recommence until the Qualified Paleontologist has completed the site evaluation and recovery process. b. Additional Mitigation Measures Applicable Only to Lands with High Paleontological Sensitivity. Some DFA lands along the western margins of the VCIP Plan Area are located within areas where high sensitivity Pleistocene and Plio-Pleistocene deposits are exposed at the ground surface. The following mitigation measures apply to VCIP projects on these lands: i) Prepare Paleontological Resource Management Plan (PRMP). Prior to the commencement of ground-disturbing activities (i.e., during construction or decommissioning), the Qualified Paleontologist shall prepare a PRMP for the project. The PRMP shall, based upon the site-specific characteristics applicable to each project, establish field reconnaissance methodology; paleontological monitoring procedures; communication protocols to be followed if an unanticipated fossil discovery is made during project development; and preparation, curation, and reporting requirements. ii) Construction/Decommissioning Monitoring. As recommended by the PRMP, full-time monitoring shall be required during ground-disturbing activities, including visual inspection of excavated or graded areas and trench sidewalls for evidence of fossils. If a paleontological resource is discovered, the monitor shall divert the construction equipment around the find temporarily until it is assessed for scientific significance and collected and the steps described in "a.iii" above shall be implemented. Monitoring efforts can be reduced or eliminated at the discretion of the Qualified Paleontologist if no fossil resources are encountered after initiation of ground disturbing activity. [*Continued on next page.*]

TABLE ES-1 (CONT'D)
SUMMARY OF IMPACTS AND MITIGATION MEASURES

POTENTIAL IMPACT	MITIGATION MEASURE (MM)
4.7. GEOLOGY AND SOILS (CONT'D)	
GEO-9. Loss of Paleontological Resources (Cont'd)	
VCIP Energy Resource and Infrastructure Plans (Cont'd)	[*Continued from preceding page*.] c. Additional Mitigation Measures Applicable Only to Lands with Low Paleontological Sensitivity. Most of the lands within the VCIP Plan Area are in low sensitivity Holocene-era fan and basin deposits which are underlain by high sensitivity older Pleistocene deposits at depths of at least 5 feet below the ground surface. The following additional mitigation measures apply to VCIP projects on these lands: i) Spot Checking and Construction/Decommissioning Monitoring. Within these areas, excavations of 5 feet or deeper shall be initially spot checked to determine whether excavations will disturb older alluvial deposits where scientifically important fossils may be present. In the event that paleontologically sensitive sediments are observed, full-time monitoring shall be initially implemented for excavations which extend to the depth of the older alluvial deposits. Ground disturbing activity that does not exceed 5 feet in depth shall not require paleontological spot-checking or monitoring. If it is determined that only sediments that are not conducive to fossil preservation would be disturbed by excavation, the monitoring program should be reduced or suspended as recommended by the Qualified Paleontologist. In the event of a fossil discovery, the steps prescribed in "a.iii" above shall be implemented. **Significance after Mitigation: Less-than-Significant Impact.**
4.8. GREENHOUSE GAS EMISSIONS	
GHG-1. Greenhouse Gas Emissions	
VCIP Energy Resource and Infrastructure Plans. Implementation of the VCIP Energy Resource and Infrastructure Plans would result in the generation of greenhouse gas emissions, both directly and indirectly, during construction, operation, and decommissioning. However, the GHG emissions resulting from VCIP implementation would be vastly outweighed by the GHG emission reductions and substantial net benefit related to global climate change resulting from the clean power generation and storage provided by VCIP solar and energy storage projects. **(*Less-than-Significant Impact*)**	**No mitigation is required.**

TABLE ES-1 (CONT'D)
SUMMARY OF IMPACTS AND MITIGATION MEASURES

POTENTIAL IMPACT	MITIGATION MEASURE (MM)
4.8. GREENHOUSE GAS EMISSIONS (CONT'D)	
GHG-2. Conflict with GHG Reduction Plans	
VCIP Energy Resource and Infrastructure Plans. Implementation of the VCIP Energy Resource and Infrastructure Plans would not conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHGs. **(*No Impact*)**	**No mitigation is required.**
4.9. HAZARDS AND HAZARDOUS MATERIALS	
HAZ-1. Potential Hazard from Routine Transport, Use, or Disposal of	**Hazardous Materials**
VCIP Energy Resource and Infrastructure Plans. Hazardous materials could be released during construction, operation, and decommissioning of the VCIP facilities. Potential hazards would be reduced to less-than-significant levels through compliance with applicable laws, regulations, and other requirements governing the transport, handling, use, storage, and disposal of hazardous materials. **(*Less-than-Significant Impact*)**	**No mitigation is required.**
HAZ-2. Hazards Related to Battery Energy Storage Systems (BESS)	
VCIP Energy Resource and Infrastructure Plans. Installation and operation of BESS in VCIP projects would potentially result in health, safety, and environmental hazards. These hazards can largely be avoided or reduced to a level that is less than significant through compliance with the codes and standards specific to BESS facilities; however, additional mitigation measures may be applicable at the project level to address site-specific conditions. **(*Less-than-Significant Impact with Mitigation*)**	**MM HAZ-1: Hazards Associated with BESS** To ensure that potential health, safety, and environmental hazards associated with the operation of Battery Energy Storage Systems under the VCIP are avoided or reduced to less than significant, the following measures are applicable at the project level: 1) Code Compliance in Facility Planning and Design: All BESS systems and components shall be designed and constructed in accordance with the most up-to-date applicable provisions of the California Fire Code, as supplemented and amended by the Fresno County Fire Code, and administered by the Fresno County Fire Protection District (FCFPD). [*Continued on next page.*]

TABLE ES-1 (CONT'D)

SUMMARY OF IMPACTS AND MITIGATION MEASURES

POTENTIAL IMPACT	MITIGATION MEASURE (MM)
4.9. HAZARDS AND HAZARDOUS MATERIALS (CONT'D)	
HAZ-2. Hazards Related to Battery Energy Storage Systems (BESS)	**(Cont'd)**
VCIP Energy Resource and Infrastructure Plans (Cont'd)	[*Continued from preceding page*.] 2) Coordinate with FCFPD (and other relevant local agencies) in Facility Planning and Design: In the early stages of facility planning and design, the project proponent shall coordinate with the FCFPD (and other relevant local agencies) on the details of facility design, taking into account climatic and environmental conditions and proximity to sensitive receptors, and incorporating lessons learned from previous incidents involving BESS. Depending on site location and local conditions, this coordination shall inform decisions on the need for setbacks or perimeter walls, the design of fire suppression systems including minimum volume of water storage and minimum water pressure for fire suppression, emergency vehicle access, among other facility design considerations for reduction of potential hazards to health and safety to less than significant. 3) Coordination with FCFPD (and other relevant local agencies) in Preparing Emergency Preparedness and Response Plans: In accordance with CPUC GO 167-C, the project proponent shall establish and implement Maintenance and Operation Standards for Energy Storage Systems, and Emergency Response and Emergency Action Plans for Energy Storage Systems. The project proponent shall coordinate with FCFPD (and other relevant local agencies) in the preparation and implementation of these objective standards and associated plans. For installation and maintenance, the plans shall include provisions to ensure proper installation, regular inspections, real-time monitoring systems to identify any defects, and malfunctioning systems to prevent potential failures that could result in fire incidents. For emergency response, the plans shall include provisions for the establishment of proactive and effective communication links, sharing of technical knowledge unique to BESS technology and safety issues, and regular training and education programs specific to potential BESS safety and incident response. In addition to the required elements of the Emergency Response and Action Plans, the Plans shall include the following provisions: 1) the Plans shall be submitted to the District and FCFPD no less than 60 days prior to construction; and 2) the project owner/operator shall notify the District and FCFPD within one hour, after it is safe and feasible, of specified incidents, such as activation of onsite emergency fire suppression system equipment to combat fire. [*Continued on next page.*]

TABLE ES-1 (CONT'D)
SUMMARY OF IMPACTS AND MITIGATION MEASURES

POTENTIAL IMPACT	MITIGATION MEASURE (MM)
4.9. HAZARDS AND HAZARDOUS MATERIALS (CONT'D)	
HAZ-2. Hazards Related to Battery Energy Storage Systems (BESS)	**(Cont'd)**
VCIP Energy Resource and Infrastructure Plans (Cont'd)	[*Continued from preceding page*.] 4) Post-Fire Environmental Monitoring. The project proponent shall develop an air quality and water quality sampling plan to address potential container fires at the BESS. The plan shall include actions to implement so that appropriate air quality measurements can be taken immediately/automatically on-site during a fire and off-site measurements can be taken in real time to identify areas that are affected by smoke from the fire vs. areas that are not affected by the smoke plume from the fire. The project proponent shall have a contract in place (as part of the sampling plan) with an air testing company (or the local Air District) that can respond within hours to collect air samples from a thermal runaway event. The project proponent shall submit the proposed sampling plan to the District and FCFPD 45 days prior to proposed BESS operations for review, revisions, and approval prior to BESS operations. In the event of a fire incident at a BESS facility, the FCFPD shall immediately request that the U.S. EPA and SJVAPCD conduct continuous air quality monitoring during and after the fire incident, and shall request that DTSC and Fresno County Environmental Health conduct surface water, soil, and drinking water sampling and testing for the presence of contaminants in actionable concentrations. Based on the results of the testing for contaminants, the health and safety agencies shall issue public health advisories and clean-up orders as appropriate. **Significance after Mitigation: Less-than-Significant Impact.**
HAZ-3. Hazards Related to Past and Present Agricultural Operations	
VCIP Energy Resource and Infrastructure Plans. The ground disturbing activities associated with implementation of the VCIP Energy Resource and Infrastructure Plans pose potential environmental health hazards by mobilizing petroleum products and agricultural chemicals that may be present in the soil. Any potential hazards would be addressed by environmental assessments and completion of any required remediation for each project site prior to development. **(*Less-than-Significant Impact with Mitigation*)**	**MM HAZ-2: Complete Phase I Environmental Site Assessment** Phase I ESAs shall be completed by project proponents of individual projects in the VCIP Plan Area. The Phase I ESAs shall be performed in conformance with the scope and limitations of ASTM E 1527-13 "Standard Practice for Environmental Site Assessments" and EPA "Standards and Practices for All Appropriate Inquires," 40 CFR Part 312. If potential hazardous materials contamination is identified in a project Phase I ESA, and the Phase I ESA recommends further review, the project proponent shall retain a Registered Environmental Assessor or other qualified professional to conduct follow-up sampling to characterize the contamination and to identify any required remediation that shall be conducted. These recommendations shall be implemented, and the site shall be deemed remediated by the appropriate agency (DTSC, Fresno County Department of Environmental Health Services [FCDEHS]). **Significance after Mitigation: Less-than-Significant Impact.**

TABLE ES-1 (CONT'D)
SUMMARY OF IMPACTS AND MITIGATION MEASURES

POTENTIAL IMPACT	MITIGATION MEASURE (MM)
4.9. HAZARDS AND HAZARDOUS MATERIALS (CONT'D)	
HAZ-4. Worker Exposure to Valley Fever Fungal Spores	
VCIP Energy Resource and Infrastructure Plans. The soils of the VCIP Plan Area may contain Valley Fever fungal spores, which can be released to the atmosphere during soil disturbing activity and expose construction workers to risk of Valley Fever. Implementation of Dust Control Plans, worker awareness training, and respiratory protection programs, as required by existing laws and regulations, would avoid or substantially reduce the health risk to construction workers from potential exposure to Valley Fever during implementation of the VCIP Energy Resource and Infrastructure Plans. **(*Less-than-Significant Impact*)**	**No mitigation is required.**
HAZ-5. Hazards from Abandoned Oil and Gas Wells	
VCIP Energy Resource and Infrastructure Plans. The former oil and gas wells within the VCIP Plan Area pose a risk of potential groundwater contamination and a risk that toxic gases would be released at the well sites which would pose a potential hazard to the public and the environment. Compliance with all applicable regulatory requirements and preparation of soil and groundwater contamination studies, and site remediation if necessary, would avoid or substantially reduce the potential hazard to the public and the environment. **(*Less-than-Significant Impact with Mitigation*)**	**Implement MM HAZ-2 (Complete Phase I Environmental Site Assessment).** **Significance after Mitigation: Less-than-Significant Impact.**
HAZ-6. Safety Hazards Associated with Existing Natural Gas Pipelines and Power Transmission Lines	
VCIP Energy Resource and Infrastructure Plans. The existing natural gas and petroleum pipelines and electrical transmission lines that are present within the VCIP Plan Area may pose safety hazards to construction activities in proximity to those facilities. Compliance with existing regulations and safety protocols would avoid or substantially reduce these risks. **(*Less-than-Significant Impact*)**	**No mitigation is required.**

TABLE ES-1 (CONT'D)
SUMMARY OF IMPACTS AND MITIGATION MEASURES

POTENTIAL IMPACT	MITIGATION MEASURE (MM)
4.9. HAZARDS AND HAZARDOUS MATERIALS (CONT'D)	
HAZ-7. Hazards or Hazardous Materials within ¼ Mile of Schools	
VCIP Energy Resource and Infrastructure Plans. One elementary school is located within one-quarter mile of a potential VCIP Development Focus Area where a solar PV generating facility and/or energy storage facility would be constructed. Compliance with existing laws, regulations, codes, protocols, and standards required during construction and operation of the VCIP solar and energy storage facilities would ensure that hazardous materials used at VCIP project sites are transported, handled, stored, and disposed of in a manner that would avoid or substantially reduce the risk of release of hazardous materials. **(*Less-than-Significant Impact*)**	**No mitigation is required.**
HAZ-8. Any Listed Hazardous Materials Sites on or Near Plan Area	
VCIP Energy Resource and Infrastructure Plans. Upon the cleanup and regulatory closure of the two contamination sites within and adjacent to the proposed VCIP DFAs, there would be no contamination sites within the VCIP development areas that would create a significant hazard to the public or the environment. **(*Less-than-Significant Impact with Mitigation*)**	**Implement MM HAZ-2 (Complete Phase I Environmental Site Assessment).** **Significance after Mitigation: Less-than-Significant Impact.**
HAZ-9. Electromagnetic Fields (EMFs) from Electrical Facilities	
VCIP Energy Resource and Infrastructure Plans. Residents and workers in the vicinity of the planned VCIP transmission lines, gen-tie lines, and substations could be exposed to Electromagnetic Fields (EMFs) emitted by those facilities. These infrastructure facilities therefore are planned to be routed, located, and designed in a manner to ensure that the nearest residents and workers would not be exposed to long-term EMF levels any greater than existing ambient or background levels. **(*Less-than-Significant Impact with Mitigation*)**	**MM HAZ-3: EMF Setbacks** To ensure that EMF levels from VCIP infrastructure do not exceed ambient EMF levels at sensitive receptor locations, the following setback distances are applicable at the project-specific stage: 1) For 230-kV gen-tie lines and transmission lines, the edge of the right-of-way shall be set back a minimum distance of 150 feet from the nearest residential property line. 2) For 500-kV transmission lines, the edge of the transmission right-of-way shall be set back a minimum distance of 350 feet from the nearest residential property line. 3) For 230-kV project substations, the exterior fence line of the substation shall be set back a minimum distance of 150 feet from the nearest residential property line. 4) For 500-kV collection substations, the exterior fence line of the substation shall be set back a minimum distance of 350 feet from the nearest residential property line. **Significance after Mitigation: Less-than-Significant Impact.**

TABLE ES-1 (CONT'D)
SUMMARY OF IMPACTS AND MITIGATION MEASURES

POTENTIAL IMPACT	MITIGATION MEASURE (MM)
4.9. HAZARDS AND HAZARDOUS MATERIALS (CONT'D)	
HAZ-10. Photovoltaic Heat Island Effects	
VCIP Energy Resource and Infrastructure Plans. Air temperatures at the VCIP solar facilities could increase due to the potential heat island effects of solar PV arrays. The best available scientific information indicates, however, that any potential increases in air temperature would be insubstantial and would dissipate within short distances from the solar facilities. **(*Less-than-Significant Impact*)**	**No mitigation is required.**
HAZ-11. Hazards to Aviation due to Physical Features and Reflective Surfaces	
VCIP Energy Resource and Infrastructure Plans. Tall physical features could pose a hazard to aircraft operation due to physical obstruction. No proposed VCIP structures would be tall enough to present a physical obstruction to aviation. The glare from reflective surfaces can be a hazard to aviation, but solar PV modules are dark in color and have low reflectivity and have not been shown to pose a hazard to aviation. **(*Less-than-Significant Impact*)**	**No mitigation is required.**
HAZ-12. Impair or Interfere with Emergency Response or Evacuation Plan	
VCIP Energy Resource and Infrastructure Plans. Implementation of the VCIP Energy Resource and Infrastructure Plans would not impair implementation of or physically interfere with an adopted emergency response plan or an emergency evacuation plan**.** **(*Less-than-Significant Impact*)**	**No mitigation is required.**

TABLE ES-1 (CONT'D)
SUMMARY OF IMPACTS AND MITIGATION MEASURES

POTENTIAL IMPACT	MITIGATION MEASURE (MM)
4.10. HYDROLOGY AND WATER QUALITY	
HYD-1. Violate Water Quality Standards or Waste Discharge Permits	
VCIP Energy Resource and Infrastructure Plans. Implementation of the VCIP Energy Resource and Infrastructure Plans would not violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality. **(*Less-than-Significant Impact*)**	**No mitigation is required.**
HYD-2. Effects on Groundwater Use and Sustainability	
VCIP Energy Resource and Infrastructure Plans. Implementation of the VCIP Energy Resource and Infrastructure Plans would not substantially decrease groundwater supplies or interfere substantially with groundwater recharge or impede sustainable groundwater management of the basin. **(*Less-than-Significant Impact*)**	**No mitigation is required.**
HYD-3. Alteration of Drainage Patterns, Erosion, Stormwater,	**Flooding**
VCIP Energy Resource and Infrastructure Plans. Implementation of the VCIP Energy Resource and Infrastructure Plans would not substantially alter the existing drainage patterns of the Plan Area, would not add substantial impervious surfaces, and would not result in substantial erosion or siltation on or off the project sites, or substantially increase the rate or amount of surface runoff or flooding on or off the project sites, or contribute runoff which would exceed the capacity of stormwater systems, or result in substantial additional sources of polluted runoff, or impede or redirect flood flows. **(*Less-than-Significant Impact with Mitigation*)**	**MM HYD-1. Complete Hydrology Study** A construction-level hydrology study shall be prepared for each VCIP project prior to grading and construction. The study shall be prepared by a qualified civil engineer who shall determine stormwater volumes and potential flood depths at the site and make recommendations for control of site drainage and avoidance or mitigation of potential flooding impacts. These may include recommendations for construction of detention basins to capture any overland stormwater flows to prevent stormwater runoff from leaving the project site, and raising project elements above calculated flood elevations. The recommendations of the hydrology study shall be incorporated into the project construction plans. **Significance after Mitigation: Less-than-Significant Impact.**
HYD-4. Release of Pollutants due to Flooding, Tsunami, Seiches	
VCIP Energy Resource and Infrastructure Plans. Implementation of the VCIP Energy Resource and Infrastructure Plans would involve little or no risk of release of pollutants due to inundation of the VCIP Plan Area from flood hazard or inundation due to dam failure, tsunami, or seiches. **(*Less-than-Significant Impact*)**	**No mitigation is required.**

TABLE ES-1 (CONT'D)

SUMMARY OF IMPACTS AND MITIGATION MEASURES

POTENTIAL IMPACT	MITIGATION MEASURE (MM)
4.10. HYDROLOGY AND WATER QUALITY (CONT'D)	
HYD-5. Conflict with Water Quality Plan or Sustainable	**Groundwater Management Plan**
VCIP Energy Resource and Infrastructure Plans. Implementation of the VCIP Energy Resource and Infrastructure Plans would not conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan. **(*No Impact*)**	**No mitigation is required.**
4.11. LAND USE AND PLANNING	
LU-1. Physically Divide an Established Community	
VCIP Energy Resource and Infrastructure Plans. Implementation of the VCIP Energy Resource and Infrastructure Plans would not physically divide an established community. **(*No Impact*)**	**No mitigation is required.**
LU-2. Conflict with any Adopted Land Use Plan, Policy, or Regulation	
VCIP Energy Resource and Infrastructure Plans. Implementation of the VCIP Energy Resource and Infrastructure Plans would not physically divide an established community. **(*No Impact*)**	**No mitigation is required.**
4.12. MINERAL RESOURCES	
MIN-1. Loss of Availability of Known Mineral Resources	
VCIP Energy Resource and Infrastructure Plans. Implementation of the VCIP Energy Resource and Infrastructure Plans would not cause loss of availability of a known mineral resource that would be of value to the region and the residents of the state. **(*Less-than-Significant Impact*)**	**No mitigation is required.**
MIN-2. Loss of Availability of a Locally Important Mineral Resource	**Recovery Site**
VCIP Energy Resource and Infrastructure Plans. Implementation of the VCIP Energy Resource and Infrastructure Plans would not cause a loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan. **(*Less-than-Significant Impact*)**	**No mitigation is required.**

TABLE ES-1 (CONT'D)

SUMMARY OF IMPACTS AND MITIGATION MEASURES

POTENTIAL IMPACT	MITIGATION MEASURE (MM)
4.13. NOISE	
NOI-1. Substantial Increase in Ambient Noise Levels	
VCIP Energy Resource and Infrastructure Plans. Implementation of the VCIP Energy Resource and Infrastructure Plans could result in substantial temporary or permanent increase in ambient noise levels in excess of applicable noise standards; however, noise levels would be reduced to less-than-significant through specified noise mitigation measures to be applied at the project-specific level. **(*Less-than-Significant Impact with Mitigation*)**	**MM NOI-1a. Noise Mitigation for Project Construction and Decommissioning** To reduce potential construction and decommissioning noise impacts resulting from VCIP implementation, the following mitigation measures are identified for application at the project-specific level, with applicability depending on the individual circumstances of each project, as follows: 1) Implement Mitigation Measure TR-1. Mitigation Measure TR-1 specifies traffic volume reduction measures that would ensure that project traffic does not reduce Level of Service below LOS C on any roadways providing construction routes to VCIP projects. 2) Within the roadway segment of South San Mateo Avenue between West Carlson Avenue and West Conejo Avenue, no through-traffic for VCIP project construction or decommissioning shall be permitted on this roadway segment to maintain average daily noise at levels no greater than 3 dBA Ldn above ambient levels at the existing residences along this roadway segment. This measure shall be implemented and enforced in accordance with the traffic and truck routing plan prepared pursuant to Mitigation Measure TR-3. 3) Within the roadway segment of West Clarkson Avenue between South Stanislaus Avenue and South San Mateo Avenue no delivery truck or equipment traffic shall be permitted on this roadway segment in order to minimize traffic noise at the Cantua Elementary School and community. This measure shall be implemented and enforced in accordance with the traffic and truck routing plan prepared pursuant to Mitigation Measure TR-3. 4) Acoustical studies shall be required to be prepared for each VCIP project. These studies shall establish baseline noise levels and evaluate estimated project traffic distribution to calculate noise level increases due to project traffic, and also identify any additional traffic reductions required to maintain construction and decommissioning noise level increases to 5 dBA Ldn or less where noise levels with the project would remain below dBA Ldn, 3 dBA Ldn or less where noise levels with the project would range from 60 to 65 dBA Ldn, and 1.5 dBA Ldn or less where noise levels with the project would exceed 65 dBA Ldn. **Significance after Mitigation: Less-than-Significant Impact.** [*Continued on next page.*]

TABLE ES-1 (CONT'D)

SUMMARY OF IMPACTS AND MITIGATION MEASURES

POTENTIAL IMPACT	MITIGATION MEASURE (MM)
4.13. NOISE (CONT'D)	
NOI-1. Substantial Increase in Ambient Noise Levels	**(Cont'd)**
VCIP Energy Resource and Infrastructure Plans (Cont'd)	**MM NOI-1b. Noise Mitigation for Project Operation** To reduce potential operational noise impacts resulting from VCIP implementation, the following mitigation measures are identified for application at the project-specific level, with applicability depending on the individual circumstances of each project, as follows: 1) Noise generating equipment at each energy resource and infrastructure project site shall be located at the following setback distances from the nearest noise-sensitive land uses unless an acoustical analysis identifies feasible mitigation (defined below) to reduce noise produced by the equipment to 50 dBA L_{50} at the location of any noise-sensitive land use: a. Power Conversion Stations (PCSs): 60 feet from nearest receptor. b. Battery Energy Storage System (BESS) with electrically powered HVAC system: 400 feet from nearest receptor. c. Battery Energy Storage System (BESS) with water cooling system: 65 feet from nearest receptor. d. Project Substation: 225 feet from nearest receptor. 2) Collection substations shall not be located within 400 feet of noise-sensitive land uses unless an acoustical analysis identifies feasible mitigation to reduce noise produced by collection substations to 50 dBA L_{50} at the location of any noise-sensitive land use. Feasible mitigation would include, but not be limited to, noise barriers which shield project noise sources from nearby sensitive land uses and selection of quieter equipment. A noise barrier that interrupts the line-of-site between the noise source and receptor would achieve a minimum 5 dBA reduction in noise. The use of noise barriers would reduce but not eliminate the minimum setback distances identified above, so some setback distance would likely still be required to meet the 50 dBA L_{50} noise limit. The acoustical studies required for each VCIP project would determine the combination of shielding and setback that would be appropriate for the proposed equipment and feasible in each case to meet the applicable noise standard**.** **Significance after Mitigation: Less-than-Significant Impact.**

TABLE ES-1 (CONT'D)
SUMMARY OF IMPACTS AND MITIGATION MEASURES

POTENTIAL IMPACT	MITIGATION MEASURE (MM)
4.13. NOISE (CONT'D)	
NOI-2. Vibration	
VCIP Energy Resource and Infrastructure Plans. Implementation of the VCIP Energy Resource and Infrastructure Plans could result in generation of excessive groundborne vibration; however, vibration levels would be reduced to less-than-significant through application of specified vibration mitigation measures at the project-specific level. **(*Less-than-Significant Impact with Mitigation*)**	**MM NOI-2. Vibration Mitigation for Project Construction** To reduce potential construction vibration impacts and annoyance to residents resulting from VCIP implementation, (i.e., to maintain vibration levels at less than 0.1 PPV at buildings and sensitive receptors), the following vibration mitigation measures are identified for application at the project-specific level, with applicability depending on the individual circumstances of each project, as follows: 1) Avoid using sonic pile drivers, vibratory rollers, or dropping heavy equipment (e.g., clam shovel drops) within 50 feet of adjacent buildings. 2) Avoid using hoe rams, bulldozers, or drills within 25 feet of adjacent buildings. 3) Substitute smaller equipment to complete the tasks designated for vibratory equipment within 50 feet of sensitive receptors. 4) Provide construction notification. Notice shall be mailed no less than 15 days prior to construction to all residents, property owners, businesses, and public agencies that have facilities within 500 feet of the project area. The notice shall state the type of construction activities that will be conducted, the location and duration of construction, and contact information for the project Disturbance Coordinator. 5) Designate a Disturbance Coordinator responsible for registering and investigating claims of excessive vibration. The contact information for the Disturbance Coordinator shall be posted on the construction site. **Significance after Mitigation: Less-than-Significant Impact.**
NOI-3. Exposure to Aircraft	
VCIP Energy Resource and Infrastructure Plans. Implementation of the VCIP Energy Resource and Infrastructure Plans would not result in exposure of workers at VCIP project sites to excessive noise levels from aircraft operations at airports or airstrips in the vicinity. **(*Less-than-Significant Impact*)**	**No mitigation is required.**

TABLE ES-1 (CONT'D)
SUMMARY OF IMPACTS AND MITIGATION MEASURES

POTENTIAL IMPACT	MITIGATION MEASURE (MM)
4.14. POPULATION AND HOUSING	
PH-1. Induce Substantial Unplanned Population Growth in the Area	
VCIP Energy Resource and Infrastructure Plans. Implementation of the VCIP Energy Resource and Infrastructure Plans would not induce substantial unplanned population growth in the area, either directly or indirectly. **(*Less-than-Significant Impact*)**	**No mitigation is required.**
PH-2. Displace Substantial Numbers of Existing People or Housing	
VCIP Energy Resource and Infrastructure Plans. Implementation of the VCIP Energy Resource and Infrastructure Plans would not displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere. **(*Less-than-Significant Impact*)**	**No mitigation is required.**
4.15. PUBLIC SERVICES	
PS-1. Fire Protection Services	
VCIP Energy Resource and Infrastructure Plans. Implementation of the VCIP Energy Resource and Infrastructure Plans would result in an incremental increase in demand for fire protection services, which is expected to be insubstantial. To the extent this increase could be substantial and thus could result in degradation of service levels or in the need for new or expanded facilities, the impact would be reduced to less-than-significant through mitigation at the project-specific level. **(*Less-than-Significant Impact with Mitigation*)**	**MM PS-1. Fire Protection Mitigation** Prior to the issuance of building permits for each solar and BESS project to be constructed under the VCIP, the project proponent and the FCFPD shall enter into an agreement regarding funding of FCFPD services, if applicable, in the absence of increased property tax revenues generated by the project sufficient to cover the demonstrated cost of providing service to the project. The amount of funding to be provided by each project, if any, shall be supported by a financial analysis which establishes the requisite nexus and provides substantial evidence that the calculated funding amount bears a reasonable relationship (i.e., is roughly proportional) to the cost of FCFPD services to be provided to the project. **Significance after Mitigation: Less-than-Significant Impact.**
PS-2. Law Enforcement and Security	
VCIP Energy Resource and Infrastructure Plans. Implementation of the VCIP Energy Resource and Infrastructure Plans would result in an incremental increase in demand for law enforcement services; however, this increase is expected to be insubstantial and therefore would not degrade service levels or result in the need for new or altered law enforcement facilities. **(*No Impact*)**	**No mitigation is required.**

TABLE ES-1 (CONT'D)
SUMMARY OF IMPACTS AND MITIGATION MEASURES

POTENTIAL IMPACT	MITIGATION MEASURE (MM)
4.15. PUBLIC SERVICES (CONT'D)	
PS-3. Schools, Parks, and Other Public Facilities	
VCIP Energy Resource and Infrastructure Plans. Implementation of the VCIP Energy Resource and Infrastructure Plans would result in no demand for schools, parks, or other public facilities, and therefore would not degrade service levels or result in the need for new or altered schools, parks, or other public facilities. **(*No Impact*)**	**No mitigation is required.**
4.16. TRANSPORTATION	
TR-1. Conflict with a Transportation Program, Plan, Ordinance	**Policy**
VCIP Energy Resource and Infrastructure Plans. Implementation of the VCIP Energy Resource and Infrastructure Plans would potentially result in temporary conflicts with Level of Service policies applicable to area highways and roads during VCIP project construction; however, traffic management measures would reduce the potential impacts to less than significant. **(*Less-than-Significant Impact with Mitigation*)**	**MM TR-1. Traffic LOS Mitigation for Project Construction and Decommissioning** To reduce potential construction traffic LOS impacts resulting from VCIP implementation, the following traffic mitigation measures are identified for application at the project stage, with applicability depending on the individual circumstances of each project, as follows: 1) Prior to the start of construction (and decommissioning), the project proponent shall submit a Construction Traffic Management Plan (Plan) to the approving agency for review and approval. The Plan shall be supported by a Traffic Impact and Mitigation Report (Report) which demonstrates that the measures proposed in the Plan would maintain the Level of Service (LOS) on all roadways and intersections affected by project construction/decommissioning traffic to LOS C or better. The mitigation measures in the Plan shall include the following measures. a. Provide shuttle bus service for commuting construction/decommissioning workers from population centers (e.g., Fresno metro area) to and from VCIP construction sites. Mitigation shall consist solely of shuttle bus service, as specified in 'a', since shuttle bus service would demonstrably mitigate LOS impacts. However, if additional mitigations, such as those listed 'b' through 'e' below, can be quantitatively demonstrated to achieve the applicable LOS standards, then consideration can be given to implementation of a combination of mitigation measures, consisting of 'a,' at a minimum, and some combination of 'b' through 'e' below, or their functional equivalents. [*Continued on next page.*]

TABLE ES-1 (CONT'D)

SUMMARY OF IMPACTS AND MITIGATION MEASURES

POTENTIAL IMPACT	MITIGATION MEASURE (MM)
4.16. TRANSPORTATION (CONT'D)	
TR-1. Conflict with a Transportation Program, Plan, Ordinance	**Policy (Cont'd)**
VCIP Energy Resource and Infrastructure Plans (Cont'd)	[*Continued from preceding page*.] b. Provide ridesharing information and matching service to facilitate carpooling or vanpooling, particularly for construction/decommissioning workers commuting from more remote areas where shuttle bus service may not be made available. c. Schedule daily construction/decommissioning activity so that start and finish times are staggered to reduce concentration of worker traffic particularly during the peak periods of existing traffic on affected roadways. d. Actively encourage the use of mobile phone applications that provide information on real-time traffic conditions to identify alternative travel routes for construction/decommissioning workers and delivery trucks to reduce traffic volumes on the main travel routes to the VCIP project sites. e. Limit truck deliveries of equipment and materials to non-peak traffic periods (e.g., avoid unnecessary travel from 5 to 8 AM and 3 to 6 PM). 2) In cases where other VCIP projects are planned to be constructed/decommissioned in the vicinity of the proposed project, and whose construction/decommissioning schedules overlap with the proposed project construction/decommissioning schedule, the Report shall include a report on coordination of traffic mitigation efforts by the proponents of the concurrent projects, and shall include analysis which demonstrates that the combined construction/decommissioning traffic impacts on any affected roadways and intersections would be fully mitigated so as not to result in collective degradation of service levels below LOS C. The Report shall also include a detailed summary of specific fair share mitigation measures to be implemented by each concurrent project (e.g., number of shuttle buses required for each project). Alternative approaches for implementing mitigations for collective traffic LOS impacts may be partially substituted for the recommended approach provided that it is quantitatively demonstrated in project-specific documents approved by the approving agency that the alternative approach results in maintenance of LOS C or better on all affected roadways. To coordinate the traffic studies involving multiple projects, the District or its designee shall establish a management entity to provide such coordination as needed, and to monitor the effectiveness of the planned mitigation measures. **Significance after Mitigation: Less-than-Significant Impact.**

TABLE ES-1 (CONT'D)
SUMMARY OF IMPACTS AND MITIGATION MEASURES

POTENTIAL IMPACT	MITIGATION MEASURE (MM)
4.16. TRANSPORTATION (CONT'D)	
TR-2. Conflict with CEQA Guidelines Section 15064.3, Subdivision (b) (VMT)	
VCIP Energy Resource and Infrastructure Plans. Implementation of the VCIP Energy Resource and Infrastructure Plans would not conflict with the applicable VMT reduction requirements established under CEQA Guidelines section 15064.3(b). **(*Less-than-Significant Impact with Mitigation*)**	**Mitigation Measures: Implement MM TR-1 (LOS Policy)**
TR-3. Substantially Increase Transportation Hazards	
VCIP Energy Resource and Infrastructure Plans. Implementation of the VCIP Energy Resource and Infrastructure Plans would potentially result in traffic hazards during project construction and decommissioning; however, traffic hazards would be reduced to less-than-significant through specified traffic safety measures to be applied at the project level. **(*Less-than-Significant Impact with Mitigation*)**	**MM TR-2: Traffic Safety Measures for VCIP Project Construction and Decommissioning** To reduce potential construction traffic safety impacts during the construction and decommissioning phases of VCIP implementation, the following traffic safety measures are identified for application at the project stage, with applicability depending on the individual circumstances of each project, as follows: 1) Prior to the issuance of construction or building permits and the issuance decommissioning authorizations, the project proponent shall submit a Traffic Safety Plan to the approving agenc Caltrans District 6 for review and approval. The Traffic Safety Plan shall be prepared in accorda with both the Caltrans Manual on Uniform Traffic Control Devices and Caltrans Construction Manual and must include, but not be limited to, the following elements: a. Prepare Temporary Traffic Control (TTC) plan that addresses traffic safety and control through the work zone, including during temporary lane closures (if needed) to accommodate materials delivery, transmission line stringing activities, or any other utility connections; b. Identify the timing of deliveries of heavy equipment and building materials; c. Designate construction staff to be assigned as flaggers to direct traffic into and/or through temporary traffic control zones, as needed; d. Place temporary signage, lighting, and traffic control devices, including, but not limited to, appropriate signage along access routes to indicate the presence of heavy vehicles and construction traffic; [*Continued on next page*.]

TABLE ES-1 (CONT'D)

SUMMARY OF IMPACTS AND MITIGATION MEASURES

POTENTIAL IMPACT	MITIGATION MEASURE (MM)
4.16. TRANSPORTATION/TRAFFIC (CONT'D)	
TR-3. Increased Traffic Hazards (Cont'd)	
VCIP Energy Resource and Infrastructure Plans (Cont'd)	[*Continued from preceding page*.] e. Ensure access for emergency vehicles to the project site; f. Maintain access to adjacent properties; g. Identify approved truck routes for the transport of all construction equipment and materials, and avoid truck travel through residential areas (e.g., Cantua Creek), to the extent feasible; h. Obtain all necessary encroachment permits from Fresno County and Caltrans for the work within the road rights-of-way; i. Obtain permits from Fresno County and Caltrans for oversized/overweight vehicles which may require California Highway Patrol or a pilot car escort**.** **Significance after Mitigation: Less-than-Significant Impact.** _____ **MM TR-3: Road Condition Survey and Repair Requirements** To address any pavement damage resulting from heavy truck traffic during construction and decommissioning of potential VCIP projects, the following mitigation measures are identified for application at the project stage, with applicability depending on the individual circumstances of each project, as follows: 1) Road Condition Survey. Prior to the issuance of permits and authorizations for project construction and decommissioning, respectively, a preconstruction report and a pre-decommissioning report shall be prepared by a qualified registered engineer, retained by the project proponent, to include a detailed analysis of road suitability to accommodate haul trucks during project construction and decommissioning. The reports shall be submitted to the Fresno County Department of Public Works and Planning. Prior to initiating the preconstruction or pre-decommissioning report, the proposed methodology shall be presented to the Fresno County Department of Public Works and Planning for review and approval. Based on the findings of the reports, the project may be required to make improvements to existing roads prior to construction and/or decommissioning. [*Continued on next page*.]

TABLE ES-1 (CONT'D)
SUMMARY OF IMPACTS AND MITIGATION MEASURES

POTENTIAL IMPACT	MITIGATION MEASURE (MM)
4.16. TRANSPORTATION/TRAFFIC (CONT'D)	
TR-4. Increased Traffic Hazards (Cont'd)	
VCIP Energy Resource and Infrastructure Plans (Cont'd)	[*Continued from preceding page*.] 2) Road Repair Agreement. Prior to the issuance of permits and authorizations for project construction and decommissioning, the project proponent shall enter into a secured agreement with Fresno County to ensure that the project contributes its fair-share portion toward repairs of County roads and/or State highways that are demonstrably damaged by the project. The extent of roadway impacts shall be determined in consultation with Fresno County and/or Caltrans District 6, as applicable. Subject to the discretion of the County of Fresno and Caltrans District 6, roadway impacts shall be mitigated either by construction of an overlay, reconstruction of the pavement section, or by participating financially for the costs of the mitigation to the extent of the project's fair share. **Significance after Mitigation: Less-than-Significant Impact.**
TR-4. Result in Inadequate Emergency Access	
VCIP Energy Resource and Infrastructure Plans. Implementation of the VCIP Energy Resource and Infrastructure Plans would not result in inadequate emergency access. **(*Less-than-Significant Impact*)**	**No mitigation is required.**
4.17. UTILITIES AND SERVICE SYSTEMS	
UTS-1. Relocation or Construction of New or Expanded Utility	**Systems**
VCIP Energy Resource and Infrastructure Plans. Implementation of the VCIP Energy Resource and Infrastructure Plans would not require or result in the relocation or construction of new or expanded facilities for water, wastewater treatment facilities or stormwater drainage, electric power, natural gas, or telecommunications, the construction or relocation of which could cause significant environmental effects; therefore, the impact would be *less-than-significant*. **(*Less-than-Significant Impact*)**	**No mitigation is required.**

TABLE ES-1 (CONT'D)
SUMMARY OF IMPACTS AND MITIGATION MEASURES

POTENTIAL IMPACT	MITIGATION MEASURE (MM)
4.17. UTILITIES AND SERVICE SYSTEMS (CONT'D)	
UTS-2. Sufficient Water Supplies to Serve the Project	
VCIP Energy Resource and Infrastructure Plans. There are sufficient water supplies available to serve the implementation of the VCIP Energy Resource and Infrastructure Plans during normal, dry and multiple dry years during a 20-year projection, in addition to existing and reasonably foreseeable future uses; therefore, the impact would be *less-than-significant*. **(*Less-than-Significant Impact*)**	**No mitigation is required.**
UTS-3. Wastewater Treatment and Disposal	
VCIP Energy Resource and Infrastructure Plans. The VCIP solar and energy storage facilities would be served by individual septic systems, which would be located, designed, constructed, operated, and maintained in accordance with Fresno County and Regional Water Quality Control Board requirements and standards, such that potential impacts to wastewater treatment capacity would be less than significant. **(*Less-than-Significant Impact*)**	**No mitigation is required.**
UTS-4. Solid Waste Service and Landfill Capacity	
VCIP Energy Resource and Infrastructure Plans. The VCIP energy and infrastructure projects would not generate solid waste in excess of state or local standards, in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste goals. **(*Less-than-Significant Impact*)**	**No mitigation is required.**
UTS-5. Compliance with Solid Waste Laws and Regulations	
VCIP Energy Resource and Infrastructure Plans. The energy and infrastructure projects developed under the VCIP would comply with applicable laws and regulations related to the management and reduction of solid waste. **(*Less-than-Significant Impact*)**	**No mitigation is required.**

TABLE ES-1 (CONT'D)
SUMMARY OF IMPACTS AND MITIGATION MEASURES

POTENTIAL IMPACT	MITIGATION MEASURE (MM)
4.18. WILDFIRE	
WF-1. Risk of Wildfire and Related Effects	
VCIP Energy Resource and Infrastructure Plans. Implementation of the VCIP Energy Resource and Infrastructure Plans would not expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires. Compliance with all applicable regulations, codes, standards, and required fire safety measures during construction, operation, and decommissioning of VCIP clean energy and infrastructure projects, would provide a high degree of protection from wildfire risk. **(*Less-than-Significant Impact*)**	**No mitigation is required.**
WF-2. Impairment of Emergency Response or Evacuation Plans	
VCIP Energy Resource and Infrastructure Plans. Implementation of the VCIP Energy Resource and Infrastructure Plans would not substantially impair an adopted emergency response plan or emergency evacuation plan. **(*Less-than-Significant Impact*)**	**No mitigation is required.**
WF-3. Exacerbation of Wildfire Risk due to Slopes, Prevailing Winds, etc.	
VCIP Energy Resource and Infrastructure Plans. Implementation of the VCIP Energy Resource and Infrastructure Plans would not exacerbate fire risks due to slopes, prevailing winds, or other factors and thus would not expose project occupants to pollutants from wildfire or uncontrolled spread of wildfire. **(*Less-than-Significant Impact*)**	**No mitigation is required.**
WF-4. Exacerbation of Wildfire Risk due to Installation of Infrastructure	
VCIP Energy Resource and Infrastructure Plans. Implementation of the VCIP Energy Resource and Infrastructure Plans would not 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. **(*Less-than-Significant Impact*)**	**No mitigation is required.**

TABLE ES-1 (CONT'D)
SUMMARY OF IMPACTS AND MITIGATION MEASURES

POTENTIAL IMPACT	MITIGATION MEASURE (MM)
4.18. WILDFIRE (CONT'D)	
WF-5. Exposure of People or Structures to Post-Fire Flooding or	**Landslides**
VCIP Energy Resource and Infrastructure Plans. Implementation of the VCIP Energy Resource and Infrastructure Plans would not 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. **(*Less-than-Significant Impact*)**	**No mitigation is required.**