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November 02, 2023

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Subject: **Canyon Road Solar Energy Project
Mitigated Negative Declaration (MND)
State Clearinghouse No. 2023100158**

Dear Tiffany Ho:

The California Department of Fish and Wildlife (CDFW) received a Mitigated Negative Declaration (MND) from Merced County Community and Economic Development Department (Merced County), as Lead Agency, for the Canyon Road Solar Energy Project (Project) pursuant the California Environmental Quality Act (CEQA) and CEQA Guidelines.¹

Thank you for the opportunity to provide comments and recommendations regarding those activities involved in the Project that may affect California fish and wildlife. Likewise, CDFW appreciates the opportunity to provide comments regarding those aspects of the Project that CDFW, by law, may be required to carry out or approve through the exercise of its own regulatory authority under the Fish and Game Code.

CDFW ROLE

CDFW is California's **Trustee Agency** for fish and wildlife resources and holds those resources in trust by statute for all the people of the State (Fish & G. Code, §§ 711.7, subd. (a) & 1802; Pub. Resources Code, § 21070; CEQA Guidelines § 15386, subd. (a)). CDFW, in its trustee capacity, has jurisdiction over the conservation, protection, and management of fish, wildlife, native plants, and habitat necessary for biologically sustainable populations of those species (*Id.*, § 1802). Similarly, for purposes of CEQA, CDFW is charged by law to provide, as available, biological

¹ CEQA is codified in the California Public Resources Code in section 21000 et seq. The "CEQA Guidelines" are found in Title 14 of the California Code of Regulations, commencing with section 15000.

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expertise during public agency environmental review efforts, focusing specifically on projects and related activities that have the potential to adversely affect fish and wildlife resources.

CDFW is also submitting comments as a **Responsible Agency** under CEQA (Pub. Resources Code, § 21069; CEQA Guidelines, § 15381). CDFW expects that it may need to exercise regulatory authority as provided by the Fish and Game Code. As proposed, for example, the Project may be subject to CDFW's lake and streambed alteration regulatory authority (Fish & G. Code, § 1600 et seq.). Likewise, to the extent implementation of the Project as proposed may result in "take" as defined by State law of any species protected under the California Endangered Species Act (CESA) (Fish & G. Code, § 2050 et seq.), related authorization as provided by the Fish and Game Code will be required.

Fully Protected Species: CDFW has jurisdiction over fully protected species of birds, mammals, amphibians and reptiles, and fish, pursuant to Fish and Game Code sections 3511, 4700, 5050, and 5515. Take of any fully protected species was previously prohibited and CDFW was not able authorize their incidental take. Senate Bill No. 147, which became effective on July 10, 2023, amended Fish and Game Code sections 3511, 4700, 5050, and 5515, and added 2081.15, to authorize CDFW the ability to issue a permit under CESA that authorizes the take of a fully protected species resulting from impacts attributable to the implementation of specified projects, which includes industrial solar photovoltaic projects, if certain conditions are satisfied.

Nesting Birds: CDFW has jurisdiction over actions with potential to result in the disturbance or destruction of active nest sites or the unauthorized take of birds. Fish and Game Code sections that protect birds, their eggs, and nests include 3503 (regarding unlawful take, possession or needless destruction of the nest or eggs of any bird), 3503.5 (regarding the take, possession or destruction of any birds-of-prey or their nests or eggs), and 3513 (regarding unlawful take of any migratory nongame bird).

Unlisted Species: Species of plants and animals need not be officially listed as Endangered, Rare, or Threatened (E, R, or T) on any State or Federal list to be considered E, R, or T under CEQA. If a species can be shown to meet the criteria for E, R, or T, as specified in the CEQA Guidelines section 15380, CDFW recommends it be fully considered in the environmental analysis for the Project.

As a responsible agency, CDFW is responsible for providing, as available, biological expertise during public agency environmental review efforts (e.g., CEQA), focusing specifically on project activities that have the potential to adversely affect fish and wildlife resources. CDFW provides recommendations to identify potential impacts and possible measures to avoid or reduce those impacts.

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PROJECT DESCRIPTION SUMMARY

Proponent: RPCA Solar 6, LLC

Objective: The Project proposes to construct an approximately 5-megawatt (MW) solar photovoltaic (PV) electric generating facility (facilities) on approximately 33 acres of a 318-acre parcel. The Project would be located at the southern edge of the parcel. The facilities would consist of a ground-mounted, single-axis tracking system featuring 13,905 PV panels and 40 string inverters. Additionally, the project would be equipped with energy storage technology (battery energy storage system [BESS]) that would allow onsite renewable energy generation to be stored and dispatched onto the grid when needed. The BESS would be located in the southwest corner of the parcel. The project would connect to existing Pacific Gas and Electric Company (PG&E) distribution lines on the southern boundary of the project. Other site improvements include the construction of two transformers, utility poles, perimeter fencing, signage, and construction of a formalized 12-foot access point off either Canyon Road or a private road via Volta Road, which would provide access throughout the site.

Location: The Project site is located on Assessor's Parcel Number (APN) 088-020-039, a 318-acre parcel located in Merced County on Canyon Road. The Project site is located in the Los Banos area and is approximately 0.4 mile north of the Los Banos Reservoir. The northeastern corner of the Project site is adjacent to Interstate 5 (I-5), which runs northwest to southeast, east of the Project site.

Timeframe: Construction is anticipated to occur from July through December 2024.

COMMENTS AND RECOMMENDATIONS

CDFW offers the comments and recommendations below to assist Merced County in adequately identifying and/or mitigating the Project's significant, or potentially significant, direct, indirect, and cumulative impacts on fish and wildlife (biological) resources. Editorial comments or other suggestions may also be included to improve the CEQA document.

Aerial imagery of the Project boundary and its surroundings show the area contains several natural habitats including annual grassland, which may have suitable habitat for special-status species. Based on a review of the Project description, a review of California Natural Diversity Database (CNDDDB) records, and the surrounding habitat, several special-status species could potentially be impacted by Project activities.

Currently, the MND acknowledges that the Project area is within the geographic range of several special-status animal species and proposes specific mitigation measures to reduce impacts to less than significant. CDFW has concerns about the ability of some

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the proposed mitigation measures to reduce impacts to less than significant and avoid unauthorized take for several special-status animal species, including the State threatened and federally endangered San Joaquin kit fox (*Vulpes macrotis mutica*); the State threatened Swainson's hawk (*Buteo swainsoni*); the State fully protected and endangered and federally endangered blunt-nosed leopard lizard (*Gambelia sila*); the State and federally threatened California tiger salamander (*Ambystoma californiense*); the State candidate for listing Crotch's bumble bee (*Bombus crotchii*); the State species of special concern American badger (*Taxidea taxus*) and burrowing owl (*Athene cunicularia*); and the State species of special concern and federally threatened California red-legged frog (*Rana draytonii*). CDFW is also concerned with potential impacts to migratory and non-migratory nesting birds, including the State watch list species California horned lark (*Eremophila alpestris actia*).

San Joaquin Kit Fox

Mitigation Measure MM BIO-4 states that, "Approximately 60 days prior to the construction start date, a qualified biologist shall perform early evaluation surveys in accordance with the current USFWS-approved protocol for SJKF for the Northern Range, prepared by the Sacramento Fish and Wildlife Office (June 1999). Early evaluation surveys will determine the potential for presence of SJKF onsite. Upon completion of early evaluation surveys, informal consultation with the USFWS shall be initiated to determine proper techniques to avoid impacts to this species during project construction, which would be considered significant under CEQA." CDFW concurs with this portion of MM BIO-4 but recommends that early coordination also occur with CDFW concurrently with U.S. Fish and Wildlife Service (USFWS) informal consultation as San Joaquin kit fox (SJKF) is both a State and federally listed species. Additionally, the area from around Los Banos Reservoir to the north of San Luis Reservoir, which includes the Project area, has been identified by CDFW and USFWS as a migratory corridor critical to the continued existence and genetic diversity of the northern kit fox population – with the Santa Nella area being identified as a critical SJKF migratory "pinch-point" within this area. As a result, any upland habitat in this area that could serve as movement or rest areas for SJKF has very high conservation values for this species.

As the Project area is within a vital corridor for the northern SJKF population and SJKF are anticipated to utilize the Project site over the life of the Project, CDFW also strongly recommends the following:

Recommended Mitigation Measure 1: SJKF Avoidance Buffer

CDFW recommends implementing no-disturbance buffers, as described in the USFWS' "Standardized Recommendations for Protection of the San Joaquin Kit Fox Prior to or During Ground Disturbance" (2011) (USFWS Protocol) around potentially suitable or known SJKF den sites. If the no-disturbance buffers outlined in the

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USFWS Protocol cannot be maintained, then consultation with CDFW is warranted to determine if the Project can avoid take or if take authorization is necessary as described below.

Recommended Mitigation Measure 2: SJKF Take Authorization

If the no-disturbance buffers outlined in the USFWS Protocol for SJKF are not feasible, then CDFW recommends the Project obtain an Incidental Take Permit (ITP), pursuant to Fish and Game Code section 2081 subdivision (b).

CDFW would also like to note that SJKF are often attracted to construction areas due to the type and level of activity (pipes, excavation, etc.) and the loose, friable soils that are created as a result of intensive ground disturbance. There is a strong potential that SJKF could move through or utilize the Project area during construction and operations and maintenance. Coupled with the fact that the Project area is within a “pinch point” for SJKF genetic diversity within the northern range, CDFW strongly recommends the Project proponent obtain an ITP, regardless of whether SJKF are detected during implementation of MM-BIO-4.

Mitigation Measure MM BIO-4 continues by stating that, “Security fences installed on the project site shall be designed to enable passage of SJKF and their prey, while impeding the passage of larger predators, such as coyotes (*Canis latrans*) and larger domestic dogs. All fencing shall leave a 4- to 6-inch opening between the fence mesh and the ground. The bottom of the fence fabric shall be knuckled (wrapped back to form a smooth edge) to protect wildlife that pass under the fence. Fences shall be monitored quarterly to ensure that any damage or vandalism is quickly repaired.” CDFW concurs with this measure and would like to note that this portion of MM BIO-4 is essential to maintain the habitat necessary to allow for the movement and rest areas for SJKF within the Santa Nella area.

Swainson’s Hawk

Mitigation Measure MM BIO-1 states that, “Construction shall be scheduled to avoid the bird breeding season, if feasible. If construction or vegetation removal activities must occur during the bird breeding season (February 1–August 31), surveys for active nests shall be conducted by a qualified biologist no more than 30 days prior to the start of construction. For raptors, an initial no-disturbance buffer of 500 feet shall be established around active nests and demarcated with fencing or flagging. This buffer shall be increased to 0.5-mile for Swainson’s hawk. For non-raptors, an initial no-disturbance buffer of 250 feet shall be established around active nests and demarcated with fencing or flagging. No project-related activities shall occur within the buffer zone until a qualified biologist has determined that the birds have fledged and are no longer reliant on the nest or parental care for survival. The buffer distance for species not listed under

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the CESA or ESA may be reduced at the discretion of a qualified biologist who has extensive experience observing bird behavior and monitoring nests, if the biologist observes that the birds' behavior is not disturbed by activity closer to the nest, depending on the sensitivity of the species and nest location. Buffer sizes for species listed under the CESA and/or ESA may be reduced in consultation with the responsible state and/or federal agency: CDFW and/or USFWS." CDFW understands that this measure incorporates requirements for Swainson's hawk (SWHA) surveys and nest avoidance; however, the Biological Resources Assessment (BRA), conducted in support of the Project MND, did not note conducting surveys for SWHA and the survey requirements outlined in Mitigation Measure MM BIO-1 are not specific to SWHA and are not sufficient to prevent take of SWHA if they are nesting in the area. As such CDFW recommends the following:

Recommended Mitigation Measure 3: SWHA Surveys Prior to Construction

CDFW recommends that surveys, following the entire survey methodology developed by the SWHA Technical Advisory Committee (SWHA TAC 2000), be conducted during the survey season immediately prior to construction.

CDFW concurs with the portion of MM BIO-1 that requires implementation of a ½-mile buffer around active SWHA nests; however, CDFW does not concur with the portion of the measure that states, "Buffer sizes for species listed under the CESA and/or ESA may be reduced in consultation with the responsible state and/or federal agency: CDFW and/or USFWS." and recommends that the following:

Recommended Mitigation Measure 4: SWHA Take Authorization

CDFW recommends that in the event an active SWHA nest is detected, and a ½-mile no-disturbance buffer is not feasible, then the Project obtain an ITP, pursuant to Fish and Game Code section 2081 subdivision (b).

Finally, as the Project will permanently impact SWHA foraging habitat, CDFW recommends the following:

Recommended Mitigation Measure 5: SWHA Foraging Habitat Mitigation

CDFW recommends compensation for the loss of SWHA foraging habitat as described in CDFW's "Staff Report Regarding Mitigation for Impacts to Swainson's Hawks" (CDFG 1994) to reduce impacts to foraging habitat to less than significant. The Staff Report recommends that mitigation for habitat loss occur within a minimum distance of 10 miles from known nest sites. As there are multiple historical occurrences within 10 miles of the Project site, with the closest occurrence located

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approximately 1.8 miles southwest of the Project boundary (CDFW 2023a), CDFW has the following recommendations based on the Staff Report:

- For projects within 1 mile of an active nest tree, a minimum of 1 acre of habitat management (HM) land for each acre of development is advised.
- For projects within 5 miles of an active nest but greater than 1 mile, a minimum of $\frac{3}{4}$ acre of HM land for each acre of development is advised.
- For projects within 10 miles of an active nest tree but greater than 5 miles from an active nest tree, a minimum of $\frac{1}{2}$ acre of HM land for each acre of development is advised.

Blunt-nosed Leopard Lizard

The BRA notes that blunt-nosed leopard lizard (BNLL) has a low potential to occur, and that marginal habitat is present within the Project site yet the MND did not provide any mitigation measures to avoid the take of this species. Suitable BNLL habitat includes areas of grassland and upland scrub that contain requisite habitat elements, such as small mammal burrows. BNLL also use open space patches between suitable habitats, including disturbed sites, unpaved access roadways, and canals. As noted in the MND, the Project site contains annual grassland.

As the Project site is within the known geographic range of the species, historical occurrences have been documented approximately 3.3 miles northwest of the Project site (CDFW 2023a), and the Project site contains suitable habitat, CDFW recommends the following:

Recommended Mitigation Measure 6: BNLL Surveys Prior to Construction

CDFW recommends that a qualified biologist conduct protocol surveys in accordance with the “Approved Survey Methodology for the Blunt-nosed Leopard Lizard” (CDFW 2019) survey methodology and that the surveys be conducted during the appropriate survey season immediately prior to construction. This survey protocol, designed to optimize BNLL detectability, reasonably assures CDFW that ground disturbance will not result in take of this fully protected species.

Recommended Mitigation Measure 7: BNLL Avoidance Buffer

CDFW recommends that any BNLL detection, known or potentially occupied burrows, or egg clutch sites have a minimum 395-acre buffer. This buffer is based on unpublished data from Dr. David Germano documenting that “male BNLL have home ranges up to 52 acres and that female BNLL have home ranges exceeding 98 acres, the known maximum home range sizes observed for the species, the

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unknown specific footprint of the individual BNLL's home range relative to where the lizard was observed on the surface, and the unknown location of the lizard underground when construction commences."

Given the size of the buffer recommendation outlined above relative to the overall size of the proposed Project, CDFW recommends the following if Project activities are anticipated to occur within or near occupied BNLL habitat:

Recommended Mitigation Measure 8: BNLL Take Authorization

With the passage of Senate Bill No. 147, the incidental take of BNLL may be authorized for certain categories of projects, including industrial solar photovoltaic projects. If BNLL protocol surveys find that the Project site is occupied, or the Project chooses to assume presence for BNLL, consultation with CDFW is recommended to discuss how to implement the Project and avoid take; or if avoidance is not feasible, to potentially obtain an ITP prior to any ground disturbing activities, pursuant Fish and Game Code section 2081 subdivision (b).

California Tiger Salamander

The BRA notes that California tiger salamander (CTS) has a low potential to occur, and that marginal upland habitat is present within the Project site, yet no mitigation measures were included in the MND to avoid take of this species. The MND also notes that no suitable aquatic habitat is present within 1.3 miles of the Project area. CDFW would like to point out that breeding ponds for CTS include natural vernal pools, ponds, livestock ponds, and other modified permanent and ephemeral ponds (USFWS 2017a). Review of aerial imagery indicates the presence of several depressional features within 1.3 miles of the Project site, including the overflow stream channel present at the Los Banos reservoir, and that these features that may have the potential to support breeding CTS or at least provide upland refugia for the species. In addition, the Project area or its immediate surroundings support small mammal burrows, a requisite upland habitat feature for CTS.

Given that the Project site is within the known geographic range of the species, historical occurrences have been documented approximately 4.5 miles southwest of the Project site (CDFW 2023a), the Project site contains suitable upland habitat, and potential breeding habitat is present within 1.3 miles of the Project site, CDFW recommends the following:

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Recommended Mitigation Measure 9: Focused CTS Protocol-level Surveys

CDFW recommends that a qualified biologist conduct protocol level surveys in accordance with the USFWS “Interim Guidance on Site Assessment and Field Surveys for Determining Presence or a Negative Finding of the California Tiger Salamander” (USFWS CTS Protocol) (USFWS 2003) at the appropriate time of year to determine the existence and extent of CTS breeding and refugia habitat. The protocol level surveys for CTS require more than one survey season and are dependent upon sufficient rainfall to complete. CDFW advises that the protocol level survey include a 100-foot buffer around the Project site in all areas of wetland and upland habitat that could support CTS. Please be advised that protocol level survey results are viable for two years after the results are reviewed by CDFW. Note that obtaining an ITP for take of CTS from CDFW, pursuant to Fish and Game Code section 2081 subdivision (b), would assume presence of CTS and negate the need to do protocol surveys.

Recommended Mitigation Measure 10: CTS Avoidance Buffer

While it is recommended that USFWS CTS Protocol surveys be conducted and/or an ITP be obtained, if CTS protocol level surveys are not conducted, CDFW advises that a minimum 50-foot no-disturbance buffer be delineated around all small mammal burrows of any size within and/or adjacent to the Project site. Further, CDFW recommends potential or known breeding habitat within and/or adjacent to the Project site be delineated with a minimum 250-foot no-disturbance buffer. Both upland burrow and wetland breeding no-disturbance buffers are intended to minimize impacts to CTS habitat and avoid take of individuals.

Recommended Mitigation Measure 11: CTS Take Authorization

If through surveys it is determined that CTS are occupying or have the potential to occupy the Project site and a minimum 50-foot no-disturbance buffer around all small mammal burrows of any size within and/or adjacent to the Project site is not able to be maintained, CDFW recommends the Project obtain take authorization for CTS through issuance of an ITP, pursuant to Fish and Game Code section 2081 subdivision (b).

Crotch’s Bumble Bee

The BRA and MND did not analyze Crotch’s bumble bee (CBB) and no mitigation measures were proposed. CBB are known to inhabit areas of grasslands and scrub that contain requisite habitat elements for nesting, such as small mammal burrows and bunch/thatched grasses. CBB was once common throughout most of central and southern California. However, it now appears to be absent from most of their range,

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especially in the central portion of its historic range within California's Central Valley (Hatfield et al. 2014). Analyses by the Xerces Society et al. (2018) suggest there have been sharp declines in relative abundance by 98% and persistence by 80% over the last ten years. As noted in the MND, the Project site contains annual grassland. As such, CBB could potentially use the habitats within the Project site for foraging or nesting.

As the Project site is within the known geographic range of the species and the Project site contains suitable nesting and foraging habitat, CDFW recommends the following:

Recommended Mitigation Measure 12: CBB Habitat Assessment

CDFW recommends a qualified biologist conduct a habitat assessment to determine if the Project site or its immediate vicinity contain habitat suitable to support CBB. Potential nesting sites, which include all small mammal burrows, perennial bunch grasses, thatched annual grasses, brush piles, old bird nests, dead trees, and hollow logs would need to be documented as part of the assessment.

Recommended Mitigation Measure 13: CBB Surveys Prior to Construction

If potentially suitable habitat is identified, CDFW recommends that a qualified biologist conduct focused surveys for CBB, and their requisite habitat features following the methodology outlined in the Survey Considerations for California Endangered Species Act Candidate Bumble Bee Species (CDFW 2023b), during the blooming period immediately prior to construction.

Recommended Mitigation Measure 14: CBB Avoidance Buffer

If surveys cannot be completed, CDFW recommends that all small mammal burrows and thatched/bunch grasses be avoided by a minimum of 50 feet to avoid take and potentially significant impacts. If ground-disturbing activities will occur during the overwintering period (October through February), consultation with CDFW is warranted to discuss how to implement Project activities and avoid take. Any detection of CBB prior to or during Project implementation warrants consultation with CDFW to discuss how to avoid take.

Recommended Mitigation Measure 15: CBB Take Authorization

If CBB is identified during surveys, and all small mammal burrows and thatched/bunched grasses are unable to be avoided by 50 feet, CDFW recommends the Project obtain take authorization for CBB through issuance of an ITP, pursuant to Fish and Game Code section 2081 subdivision (b).

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American Badger

The BRA, conducted in support of the Project MND, notes that American badger (AMBA) has a low potential to occur, and that suitable habitat is present within the Project site, yet no mitigation measures were included in the MND to mitigate impacts to this species. AMBA occupies sparsely vegetated land cover with dry, friable soils to excavate dens, which they use for cover, and that support fossorial rodent prey populations (i.e., ground squirrels, pocket gophers, etc.) (Zeiner et. al 1990). As noted in the MND, the Project site contains suitable habitat for AMBA denning and foraging.

As the Project site is within the known geographic range of the species, historical occurrences have been documented approximately 6.0 miles northwest of the Project site (CDFW 2023a), and the Project site contains suitable habitat, CDFW recommends the following:

Recommended Mitigation Measure 16: AMBA Surveys Prior to Construction

CDFW recommends that a qualified biologist conduct focused surveys for American badger and their requisite habitat features (dens) immediately prior to construction to evaluate potential impacts resulting from ground- and vegetation-disturbance.

Recommended Mitigation Measure 17: AMBA Avoidance Buffer

Avoidance whenever possible is encouraged via delineation and observation of a 50-foot no-disturbance buffer around dens until it is determined through noninvasive means that individuals occupying the den have dispersed.

Burrowing Owl (BUOW)

The BRA notes that burrowing owl (BUOW) have a moderate potential to occur and that there is suitable habitat present within and adjacent to the Project area and the MND notes that BUOW are one of the four species with a moderate potential to occur. Mitigation Measure MM BIO-1 appears to be the only measure to mitigate impacts to BUOW, and this measure is not specific to BUOW and is not sufficient to prevent take of BUOW if they occur in the area. As such CDFW recommends the following:

Recommended Mitigation Measure 18: BUOW Surveys Prior to Construction

CDFW recommends assessing presence/absence of BUOW by having a qualified biologist conduct surveys following the California Burrowing Owl Consortium's (CBOC) "Burrowing Owl Survey Protocol and Mitigation Guidelines" (CBOC 1993) and CDFW's "Staff Report on Burrowing Owl Mitigation" (CDFG 2012) during the survey season immediately prior to construction.

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Recommended Mitigation Measure 19: BUOW Avoidance Buffer

Should a BUOW be detected, CDFW recommends that no-disturbance buffers, as outlined in the “Staff Report on Burrowing Owl Mitigation” (CDFG 2012), be implemented prior to and during any ground-disturbing activities. Specifically, CDFW’s Staff Report recommends that impacts to occupied burrows be avoided in accordance with the following table unless a qualified biologist approved by CDFW verifies through non-invasive methods that either: 1) the birds have not begun egg laying and incubation; or 2) that juveniles from the occupied burrows are foraging independently and are capable of independent survival.

Location	Time of Year	Level of Disturbance		
		Low	Med	High
Nesting sites	April 1-Aug 15	200 m*	500 m	500 m
Nesting sites	Aug 16-Oct 15	200 m	200 m	500 m
Nesting sites	Oct 16-Mar 31	50 m	100 m	500 m

* meters (m)

Recommended Mitigation Measure 20: BUOW Passive Relocation and Mitigation

If BUOW are found within these recommended buffers and avoidance is not possible, it is important to note that according to the Staff Report (CDFG 2012), excluding birds from burrows is not a take avoidance, minimization, or mitigation method and is instead considered a potentially significant impact under CEQA. However, if it is necessary for Project implementation, CDFW recommends that burrow exclusion be conducted by qualified biologists and only during the non-breeding season, by a qualified biologist, before breeding behavior is exhibited and after the burrow is confirmed empty through non-invasive methods, such as surveillance. CDFW recommends replacement of occupied burrows with artificial burrows at a ratio of one (1) burrow collapsed to one (1) artificial burrow constructed (1:1) to mitigate for evicting BUOW and the loss of burrows. BUOW may attempt to colonize or re-colonize an area that will be impacted; thus, CDFW recommends ongoing surveillance at a rate that is sufficient to detect BUOW if they return.

California Red-legged Frog

The BRA notes that California red-legged frog (CRLF) is not expected to occur as “suitable aquatic habitat for this species is not present within or adjacent to the Project area”. CDFW does not concur that suitable habitat is absent surrounding the Project site. CRLF requires a variety of habitats including aquatic breeding habitats and upland

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dispersal habitats. Breeding sites of the California red-legged frog are in aquatic habitats including pools and backwaters within streams and creeks, ponds, marshes, springs, sag ponds, dune ponds, lagoons and the species will also breed in ephemeral waters (Thomson et al. 2016). Additionally, California red-legged frogs frequently breed in artificial impoundments such as stock ponds (USFWS 2002). Breeding sites are generally found in deep, still, or slow-moving water (greater than 2.5 feet) and can have a wide range of edge and emergent cover amounts. California red-legged frogs can breed at sites with dense shrubby riparian or emergent vegetation, such as cattails or overhanging willows or can proliferate in ponds devoid of emergent vegetation and any apparent vegetative cover (i.e. stock ponds). CRLF habitat includes nearly any area within 1-2 miles of a breeding site that stays moist and cool through the summer; this includes non-breeding aquatic habitat in pools of slow-moving streams, perennial or ephemeral ponds, and upland sheltering habitat such as rocks, small mammal burrows, logs, densely vegetated areas, and even, man-made structures (i.e. culverts, livestock troughs, spring-boxes, abandoned sheds) (USFWS 2017b). Review of aerial imagery indicates the presence of several depressional features within 1 to 2 miles of the Project site, including the overflow stream channel present at the Los Banos Reservoir, and that these features that may have the potential to support breeding CRLF or at least provide upland refugia for the species. In addition, the Project area or its immediate surroundings support small mammal burrows, a requisite upland habitat feature for CRLF.

As the Project site is within the known geographic range of the species, historical occurrences have been documented approximately 4.3 miles southwest of the Project site (CDFW 2023a), the Project site contains suitable upland habitat, and breeding habitat is present within one mile of the Project site, CDFW recommends the following:

Recommended Mitigation Measure 21: CRLF Habitat Assessment

CDFW recommends that a qualified biologist conduct a habitat assessment in advance of project implementation, to determine if the depressional features surrounding the Project site contain suitable habitat for CRLF breeding.

Recommended Mitigation Measure 22: CRLF Surveys Prior to Construction

If suitable habitat is present, CDFW recommends that a qualified biologist conduct surveys for CRLF within 48 hours prior to commencing work (two night surveys immediately prior to construction or as otherwise required by the USFWS) in accordance with the USFWS Revised Guidance on Site Assessment and Field Surveys for the California Red-legged Frog (USFWS 2005) to determine if CRLF are within or adjacent to the Project.

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Recommended Mitigation Measure 23: CRLF Avoidance Buffer

If any CRLF are found during preconstruction surveys or at any time during construction, CDFW recommends that construction cease and that CDFW be contacted to discuss a relocation plan for CRLF. CDFW also recommends that initial ground-disturbing activities be timed to avoid the period when CRLF are most likely to be moving through upland areas (November 1 and March 31). If ground-disturbing activities must take place between November 1 and March 31, CDFW recommends that a qualified biologist monitor construction activity daily.

Nesting Birds

Mitigation Measure MM BIO-1 states that, "Construction shall be scheduled to avoid the bird breeding season, if feasible. If construction or vegetation removal activities must occur during the bird breeding season (February 1–August 31), surveys for active nests shall be conducted by a qualified biologist no more than 30 days prior to the start of construction. For raptors, an initial no-disturbance buffer of 500 feet shall be established around active nests and demarcated with fencing or flagging. This buffer shall be increased to 0.5-mile for Swainson's hawk. For non-raptors, an initial no-disturbance buffer of 250 feet shall be established around active nests and demarcated with fencing or flagging. No project-related activities shall occur within the buffer zone until a qualified biologist has determined that the birds have fledged and are no longer reliant on the nest or parental care for survival. The buffer distance for species not listed under the CESA or ESA may be reduced at the discretion of a qualified biologist who has extensive experience observing bird behavior and monitoring nests, if the biologist observes that the birds' behavior is not disturbed by activity closer to the nest, depending on the sensitivity of the species and nest location. Buffer sizes for species listed under the CESA and/or ESA may be reduced in consultation with the responsible state and/or federal agency: CDFW and/or USFWS." CDFW does not concur that Mitigation Measure MM BIO-1 is sufficient to mitigate impacts to nests during the bird breeding season, particularly for the portion of the measure which directs surveys for active nests no more than 30 days prior to the start of construction. As such, CDFW recommends the following:

Recommended Mitigation Measure 24: Nesting Bird Surveys Prior to Construction

If ground-disturbing activities occur during the nesting bird season (February 1 – September 15), CDFW recommends that a qualified biologist conduct pre-activity surveys for active nests no more than one week prior to the start of ground disturbance to maximize the probability that nests that could potentially be impacted are detected. CDFW also recommends that surveys cover a sufficient area around the work site to identify nests and determine their status. A sufficient area means

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any area potentially affected by a project. In addition to direct impacts (i.e., nest destruction), noise, vibration, odors, and movement of workers or equipment could also affect nests. Prior to initiation of construction activities, CDFW recommends a qualified biologist conduct a survey to establish a behavioral baseline of all identified nests.

Recommended Mitigation Measure 25: Nesting Bird Monitoring and/or Avoidance Buffer

Once construction begins, CDFW recommends a qualified biologist continuously monitor nests to detect behavioral changes resulting from the Project. If behavioral changes occur, CDFW recommends the work causing that change to cease and that CDFW be consulted for additional avoidance and minimization measures. If continuous monitoring of identified nests by a qualified biologist is not feasible, CDFW recommends a minimum no-disturbance buffer of 250 feet around active nests of non-listed bird species and a 500-foot no-disturbance buffer around active nests of non-listed raptors. These buffers are advised to remain in place until the breeding season has ended or until a qualified biologist has determined that the birds have fledged and are no longer reliant upon the nest or parental care for survival. Variance from these no-disturbance buffers is possible when there is a compelling biological or ecological reason to do so, such as when the construction area would be concealed from a nest site by topography. CDFW recommends that a qualified biologist advise and support any variance from these buffers and notify CDFW in advance of implementing a variance.

Editorial Comments and/or Suggestions

Federally Listed Species: CDFW recommends consulting with USFWS regarding potential impacts to federally listed species including but not limited to SJKF, BNLL, CTS, and CRLF. Take under the Federal Endangered Species Act (FESA) is more broadly defined than CESA; take under FESA also includes significant habitat modification or degradation that could result in death or injury to a listed species by interfering with essential behavioral patterns such as breeding, foraging, or nesting. Consultation with the USFWS in order to comply with FESA is advised well in advance of any Project activities.

Cumulative Impacts: Currently, the MND has a very broad analysis of cumulative impacts to biological resources and does not adequately evaluate impacts to specific resources. As such, the conclusions reached in the cumulative impacts analysis are not supported by substantial evidence and the analysis lacks sufficient rigor and transparency to adequately develop reasonable and feasible measures to reduce harm. To address this lack of evidence, CDFW recommends that a cumulative impact analysis be conducted for all biological resources that will either be significantly or potentially

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significantly impacted by implementation of the Project, including those whose impacts are determined to be less than significant with mitigation incorporated or for those resources that are rare or in poor or declining health and will be impacted by the Project, even if those impacts are relatively small (i.e., less than significant). CDFW recommends cumulative impacts be analyzed for the following species using an acceptable methodology to evaluate the impacts of past, present, and reasonably foreseeable future projects on resources and be focused specifically on the resource, not the Project. An appropriate resource study area should be identified and mapped for each resource being analyzed and utilized for this analysis. CDFW recommends a scientifically sound cumulative impacts analysis be conducted for the following species: SJKF, SWHA, BNLL, CTS, CBB, AMBA, BUOW, CRLF, California horned lark, and Tule elk (*Cervus canadensis nannodes*). CDFW staff is available for consultation in support of cumulative impacts analyses as a trustee and responsible agency under CEQA.

ENVIRONMENTAL DATA

CEQA requires that information developed in environmental impact reports and negative declarations be incorporated into a database, which may be used to make subsequent or supplemental environmental determinations (Pub. Resources Code, § 21003, subd. (e)). Accordingly, please report any special-status species and natural communities detected during Project surveys to the CNDDDB. The CNDDDB field survey form can be found at the following link: <https://www.wildlife.ca.gov/Data/CNDDDB/Submitting-Data>. The completed form can be mailed electronically to CNDDDB at the following email address: CNDDDB@wildlife.ca.gov. The types of information reported to CNDDDB can be found at the following link: <https://www.wildlife.ca.gov/Data/CNDDDB/Plants-and-Animals>.

FILING FEES

The Project, as proposed, would have an impact on fish and/or wildlife, and assessment of filing fees is necessary. Fees are payable upon filing of the Notice of Determination by the Lead Agency and serve to help defray the cost of environmental review by CDFW. Payment of the fee is required in order for the underlying project approval to be operative, vested, and final (Cal. Code Regs, tit. 14, § 753.5; Fish & G. Code, § 711.4; Pub. Resources Code, § 21089).

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CONCLUSION

CDFW appreciates the opportunity to comment on the MND to assist Merced County Community and Economic Development Department in identifying and mitigating Project impacts on biological resources.

If you have any questions, please contact Jeremy Pohlman, Senior Environmental Scientist (Specialist), at the address provided on this letterhead, by telephone at (805) 503-2375 or by electronic mail at Jeremy.Pohlman@wildlife.ca.gov.

Sincerely,

DocuSigned by:

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Krista Tomlinson for Julie A. Vance
Regional Manager

ec: State Clearinghouse
Governor's Office of Planning and Research
State.Clearinghouse@opr.ca.gov

United States Fish and Wildlife Service
Patricia Cole; patricia_cole@fws.gov

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REFERENCES

- California Burrowing Owl Consortium. 1993. Burrowing owl survey protocol and mitigation guidelines. The burrowing owl, its biology and management. Raptor Research Report Number 9.
- California Department of Fish and Game. 1994. Staff report regarding mitigation for impacts to Swainson's hawks (*Buteo Swainsoni*) in the Central Valley of California. California Department of Fish and Wildlife, Sacramento, California, USA.
- California Department of Fish and Game. 2012. Staff report on burrowing owl Mitigation. California Department of Fish and Wildlife, Sacramento, California, USA.
- California Department of Fish and Wildlife. 2019. Approved survey methodology for the blunt-nosed leopard lizard. California Department of Fish and Wildlife, Sacramento, California, USA.
- California Department of Fish and Wildlife. 2023a. Biogeographic information and observation system. <https://www.wildlife.ca.gov/Data/BIOS>. Accessed 15 October 2023.
- California Department of Fish and Wildlife. 2023b. Survey considerations for California Endangered Species Act candidate bumble bee species. California Department of Fish and Wildlife, Sacramento, California, USA.
- Hatfield, R., S. Colla, S. Jepsen, L. Richardson, R. Thorp, and S. Foltz Jordan. 2014. Draft IUCN Assessments for North American Bombus spp. The Xerces Society for Invertebrate Conservation, Portland, Oregon, USA.
- Swainson's Hawk Technical Advisory Committee. 2000. Recommended timing and methodology for Swainson's hawk nesting surveys in California's Central Valley. Swainson's Hawk Technical Advisory Committee.
- Thomson, R., A. Wright, and B. Shaffer. 2016. California amphibian and reptile species of special concern. California Department of Fish and Wildlife, Sacramento, California, USA, and University of California Press, Oakland, California, USA.
- U.S. Fish and Wildlife Service. 2002. Recovery plan for the California red-legged frog (*Rana aurora draytonii*). U.S. Fish and Wildlife Service, Oregon Fish and Wildlife Office, Portland, Oregon, USA.
- U.S. Fish and Wildlife Service. 2003. Interim guidance on site assessment and field surveys for determining presence or a negative finding of the California tiger

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salamander. U.S. Fish and Wildlife Service, Sacramento Fish and Wildlife Office, Sacramento, California, USA.

U.S. Fish and Wildlife Service. 2005. Revised guidance on site assessments and field surveys for the California red-legged frog. U.S. Fish and Wildlife Service, Sacramento Fish and Wildlife Office, Sacramento, California, USA.

U.S. Fish and Wildlife Service. 2011. Standard recommendations for the protection of the San Joaquin kit fox prior to or during ground disturbance. U.S. Fish and Wildlife Service, Sacramento Fish and Wildlife Office, Sacramento, California, USA.

U.S. Fish and Wildlife Service. 2017a. Recovery plan for the Central California Distinct Population Segment of the California tiger salamander (*Ambystoma californiense*). U. S. Fish and Wildlife Service, Sacramento Fish and Wildlife Office, Sacramento, California, USA.

U.S. Fish and Wildlife Service. 2017b. Species account for California red-legged frog. March 2017. U. S. Fish and Wildlife Service, Sacramento Fish and Wildlife Office, Sacramento, California, USA.

Xerces Society for Invertebrate Conservation, Defenders of Wildlife, and Center for Food Safety. 2018. A petition to the state of California Fish and Game Commission to list the Crotch bumble bee (*Bombus crotchii*), Franklin's bumble bee (*Bombus franklini*), Suckley cuckoo bumble bee (*Bombus suckleyi*), and western bumble bee (*Bombus occidentalis occidentalis*) as endangered under the California Endangered Species Act. The Xerces Society for Invertebrate Conservation, Portland, Oregon, USA.

Zeiner, D., W. Laudenslayer, Jr, K. Mayer, and M. White. 1990. California's Wildlife. Volumes I-III in California Department of Fish and Game, editor. California Department of Fish and Wildlife, Sacramento, California, USA.

Attachment 1

**CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE
RECOMMENDED MITIGATION MONITORING AND REPORTING PROGRAM
(MMRP)**

PROJECT: Canyon Road Solar Energy Project

SCH No.: 2023100158

RECOMMENDED MITIGATION MEASURE	STATUS/DATE/INITIALS
<i>Before Disturbing Soil or Vegetation</i>	
SJKF	
Recommended Mitigation Measure 2: SJKF take authorization	
SWHA	
Recommended Mitigation Measure 3: SWHA surveys prior to construction	
Recommended Mitigation Measure 4: SWHA take authorization	
Recommended Mitigation Measure 5: SWHA foraging habitat mitigation	
BNLL	
Recommended Mitigation Measure 6: BNLL surveys prior to construction	
Recommended Mitigation Measure 8: BNLL take authorization	
CTS	
Recommended Mitigation Measure 9: Focused CTS protocol-level surveys	
Recommended Mitigation Measure 11: BNLL take authorization	
CBB	
Recommended Mitigation Measure 12: CBB habitat assessment	
Recommended Mitigation Measure 13: CBB surveys prior to construction	
Recommended Mitigation Measure 15: CBB take authorization	
AMBA	
Recommended Mitigation Measure 16: AMBA surveys prior to construction	
BUOW	
Recommended Mitigation Measure 18: BUOW surveys prior to construction	
Recommended Mitigation Measure 20: BUOW passive relocation and mitigation	
CRLF	
Recommended Mitigation Measure 21: CRLF habitat assessment	

Recommended Mitigation Measure 22: CRLF surveys prior to construction	
Nesting Birds	
Recommended Mitigation Measure 24: Nesting bird surveys prior to construction	
<i>During Construction</i>	
SJKF	
Recommended Mitigation Measure 1: SJKF avoidance buffer	
BNLL	
Recommended Mitigation Measure 7: BNLL avoidance buffer	
CTS	
Recommended Mitigation Measure 10: CTS avoidance buffer	
CBB	
Recommended Mitigation Measure 14: CBB avoidance buffer	
AMBA	
Recommended Mitigation Measure 17: AMBA avoidance buffer	
BUOW	
Recommended Mitigation Measure 19: BUOW avoidance buffer	
CRLF	
Recommended Mitigation Measure 23: CRLF avoidance buffer	
Nesting Birds	
Recommended Mitigation Measure 25: Nesting bird monitoring and avoidance buffer	