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Governor's Office of Planning & Research

October 2 2023

October 2, 2023

STATE CLEARINGHOUSE

Terrance Smalls
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Subject: **Pelican's Jaw Hybrid Solar Project by Pelican's Jaw Solar, LLC
Draft Environmental Impact Report (DEIR)
State Clearinghouse No. 2022110558**

Dear Terrance Smalls:

The California Department of Fish and Wildlife (CDFW) received a Draft Environmental Impact Report (DEIR) from Kern County Planning and Natural Resources Department (Kern County), as Lead Agency, for the Pelican's Jaw Hybrid Solar Project by Pelican's Jaw Solar, LLC 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 to authorize their incidental take. Senate Bill No. 147, which became effective on July 1, 2023, amended Fish and Game Code sections 3511, 4700, 5050, and 5515 to authorize CDFW 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: Pelican's Jaw Solar, LLC

Objective: The Project proposes to construct and operate a photovoltaic (PV) solar facility and associated infrastructure which would generate up to 500 megawatts (MW) of renewable electrical energy with a battery energy storage system (BESS) capable of storing approximately 4,000 megawatt-hours (MWh) of storage capacity. The Project Permanent Facilities would include service roads, a power collection system, inverter stations, transformer systems, transmission lines, electrical switchyards, project substations, and operation and maintenance facility. The Project Permanent Facilities would also include a Pacific Gas and Electric (PG&E) switching station that would interconnect with the existing PG&E 230 kilovolt (kV) overhead transmission lines that traverse the Project site. In addition, approximately 13.3 miles of optical ground wire (OPGW) line would be installed to provide communication between the proposed PG&E switching station and the existing PG&E Arco Substation, which is located approximately 8.5 miles west of the project site. The OPGW line would be collocated with an existing PG&E overhead transmission line.

Location: The Project site is located on 3,371 acres of private property in unincorporated Kern County, California. The project site is located within United States Geological Survey 7.5-minute West Camp, Lone Tree Well, and Lost Hills NW quadrangle maps, within Sections 4, 5, 6, 7,8, 9, 15, 16, 17, 21, 22, 23, and 27 of Township 25 South, Range 21 East, San Bernardino Base and Meridian (SBB&M). The main project site is located in the Valley Region of Kern County, generally bordered by Twisselman Road to the south, Lost Hills Road to the east, Kern and Kings County line to the north, and I-5 to the west. The main project site is approximately 12 miles southeast of Kettleman City, approximately 8 miles north of the community of Lost Hills, and 4 miles west of Kern National Wildlife Refuge.

Timeframe: Construction would begin in the third quarter of 2024 and would take approximately 12 months to complete.

COMMENTS AND RECOMMENDATIONS

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

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Optical Ground Wire Line

The DEIR included an evaluation for the construction of the optical ground wire (OPGW) line, located within PG&E right of way and included as part of the Project, and included a desktop environmental analysis as an appendix to the DEIR. The DEIR noted that the OPGW line footprint could result in the same potential impacts to biological resources as identified within the Project Permanent Facilities, which includes structures such as the solar PV modules, BESS, on-site substation, and Project switching station. The analysis also noted that sensitive natural communities and stream resources could be present within the OPGW line footprint. The DEIR concluded that potential impacts to biological resources would be less than significant with the implementation of PG&E's Best Management Practices (BMPs).

CDFW would like to note that the biological resource habitat assessments and surveys for the Project, conducted from 2021 to 2023, solely focused on the Project Permanent Facilities and did not include the OPGW line. The Project Permanent Facilities includes service roads, a power collection system, inverter stations, transformer systems, transmission lines, electrical switchyards, project substations, and operation and maintenance facility. The Project Permanent Facilities also includes a Pacific Gas and Electric (PG&E) switching station that would interconnect with the existing PG&E 230 kilovolt (kV) overhead transmission lines that traverse the Project site. As the OPGW line is considered part of the overall Project, it is dependent on construction of the Project Permanent Facilities, and is considered to be a connected action (i.e. the OPGW is not considered a separate and complete project). CDFW recommends that the habitat assessment and survey recommendations provided in CDFW's December 27, 2022, Notice of Preparation (NOP) comment letter to this Project be also implemented for the OPGW line and that the Final EIR include an analysis of the Project's impacts to biological resources associated with this aspect of the Project. Conducting these biological habitat assessments and surveys will assist Kern County and PG&E with determining species presence, Project-related impacts, appropriate mitigation measures, relevant permitting requirements, and selecting an OPGW line alternative. Alternatively, the Project can assume presence for the species identified within the OPGW line, and the Project proponent can obtain an Incidental Take Permit (ITP) pursuant to Fish and Game Code section 2081 subdivision (b).

Based on the information provided in the DEIR, CDFW has concerns about the way this dependent action, the OPGW line, has been planned for and analyzed as part of the Project's DEIR. Further, CDFW does not concur that PG&E's BMPs are adequate to reduce impacts to less than significant and avoid unauthorized take for several special-status animal species including the State and federally endangered giant kangaroo rat (*Dipodomys ingens*); the State threatened San Joaquin antelope squirrel (*Ammospermophilus nelsoni*); the State threatened and federally endangered San Joaquin kit fox (*Vulpes macrotis mutica*); the State threatened Swainson's hawk (*Buteo*

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swainsoni); the State fully protected and endangered and federally endangered blunt-nosed leopard lizard (*Gambelia sila*); the State candidate for listing Crotch's bumble bee (*Bombus crotchii*); the State species of special concern American badger (*Taxidea taxus*), Tulare grasshopper mouse (*Onychomys torridus tularensis*), burrowing owl (*Athene cunicularia*), Le Conte's thrasher (*Toxostoma lecontei*), loggerhead shrike (*Lanius ludovicianus*), northern harrier (*Circus hudsonius*), coast horned lizard (*Phrynosoma blainvillii*), and San Joaquin coachwhip (*Masticophis flagellum ruddocki*); and the State watch list species California horned lark (*Eremophila alpestris actia*). CDFW also has concerns with the ability of PG&E's BMPs to reduce impacts to less than significant and avoid unauthorized take for several special-status plant species. Finally, CDFW is concerned with potential impacts to migratory and non-migratory nesting birds, sensitive natural communities, and stream resources within the OPGW line. CDFW recommends that the mitigation measures outlined in the DEIR, with the comments and recommendations provided below, be incorporated for the OPGW line, in addition to the habitat assessment and survey recommendations provided above.

Project (Including Project Permanent Facilities and OPGW)

Aerial imagery of the Project boundary and its surroundings show the area contains several natural habitats including annual grassland, irrigation ditches (some or all of which may be modified streams), the Kern River Channel, agricultural lands, and fallow fields, 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 DEIR 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 the proposed mitigation measures to reduce impacts to less than significant and avoid unauthorized take for several special-status animal species, including the State and federally endangered giant kangaroo rat; the State threatened San Joaquin antelope squirrel; the State threatened and federally endangered San Joaquin kit fox; the State and federally endangered Tipton kangaroo rat (*Dipodomys nitratooides nitratooides*); the State threatened Swainson's hawk; the State fully protected and endangered and federally endangered blunt-nosed leopard lizard; the State candidate for listing Crotch's bumble bee; and the State species of special concern Tulare grasshopper mouse, burrowing owl, coast horned lizard, San Joaquin coachwhip, and western spadefoot (*Spea hammondi*).

CDFW also has concerns about the ability of the some of the proposed mitigation measures to reduce impacts to less than significant and avoid unauthorized take for several special-status plant species including the State and Federally Endangered and

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California Rare Plant Rank (CRPR) 1B.1 California jewelflower (*Caulanthus californicus*); the CRPR 1B.2 and federally endangered Kern mallow (*Eremalche parryi* ssp. *Kernensis*) and San Joaquin woollythreads (*Monolopia congdonii*); the CRPR 1B.1 alkali sink goldfields (*Lasthenia chrysantha*), Coulter's goldfields (*Lasthenia glabrata* ssp. *Coulteri*), Horn's milk-vetch (*Astragalus hornii* var. *hornii*), Kings gold (*Tropidocarpum californicum*) and lesser saltscale (*Atriplex minuscula*); and the CRPR 1B.2 lost hills crownscale (*Atriplex coronate* var. *vallicola*), Munz's tidy-tips (*Layia munzii*), and recurved larkspur (*Delphinium recurvatum*). Finally, CDFW is concerned with potential impacts to migratory and non-migratory nesting birds.

Giant Kangaroo Rat (GKR)

Mitigation Measure MM 4.4-13 states that, "Giant kangaroo rat or Tipton kangaroo rat precincts shall be flagged and a 50-foot-wide buffer around the precincts shall be avoided by construction equipment and ground disturbing activities, if feasible." CDFW strongly recommends that all giant kangaroo rat (GKR) burrows be avoided by at least 50 feet; if this buffer cannot be maintained, then the Project must obtain an ITP, pursuant to Fish and Game Code section 2081 subdivision (b) to comply with CESA.

Mitigation Measure MM 4.4-13 continues by stating that, "If project personnel are required to drive or operate a vehicle or piece of equipment in the vicinity of a Giant kangaroo rat or Tipton kangaroo rat precinct, they shall avoid driving directly over precinct openings, seed caches, or haystacks, if practicable. If the activity requires that the vehicle travel directly over a precinct (more than simple daily pedestrian activities such as walking in and out of an area to inspect the condition of equipment) for more than 1 hour, then the following procedures shall be implemented:

- A plywood sheet or stronger material board, measuring at least 4 by 8 feet and 1 inch thick, shall be placed over the entire precinct at the start of the activity.
- Any haystacks, seed caches, or other forage stockpiled by the giant kangaroo rat, or the Tipton kangaroo rat on the surface shall be left undisturbed to the maximum extent practicable. If avoidance is not possible, the seed caches and haystacks shall be completely covered by a plywood sheet.
- More than one plywood sheet may be required to cover an area when multiple precincts occur in the vicinity of the activity.
- Vehicles and equipment shall be allowed to travel over a precinct only when all tires are driving over the plywood surface.

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- At the end of the work activity or at the end of each workday, whichever is of a shorter duration, all plywood sheets or stronger boards shall be removed from the precinct(s), and any haystacks, seed caches, or other forage stockpiles that have been covered.
- During daily pedestrian operation and maintenance activities, such as walking within an array to inspect the condition of equipment or performing panel washing, project personnel may walk on and work around precincts; however, entrances or holes in the precinct shall not be stepped on and shall be avoided to prevent damage to or plugging of these entrances, to the extent practicable. If damage to or plugging of the entrances occur, or is likely to occur, and work is scheduled to continue, personnel shall use plywood sheeting or stronger material boards to protect the precinct as described above.”

CDFW does not concur with this portion of the measure, as implementation is likely to result in unauthorized take. While these are minimization measures that could be incorporated into an ITP, they are not avoidance measures. As such, CDFW reiterates the recommendation that all GKR burrows be avoided by at least a 50 foot no-disturbance buffer and if this buffer cannot be maintained, then the Project obtain an ITP, pursuant to Fish and Game Code section 2081 subdivision (b).

San Joaquin Antelope Squirrel

Mitigation Measure MM 4.4-12 states that, “Within 30 days prior to the start of ground disturbance activities of all or any portion of the main project site, a pre-construction survey shall be conducted by a qualified biologist knowledgeable in the identification of all special-status plant and wildlife species identified by the project’s CEQA review to have potential to occur, including Le Conte’s thrasher, golden eagle, San Joaquin antelope squirrel, Crotch’s bumble bee, Kern mallow, and the Tulare grasshopper mouse on the main project site. Surveys need not be conducted for all areas at one time; they may be phased so that surveys occur within 30 days of the portion of the project site that will be disturbed. The location and nature of all special-status species observations resulting from the preconstruction survey shall be documented and any suitable dens and/or burrows that could support fossorial special-status wildlife species will be examined for potential occupancy and documented. Documentation of completed studies shall be retained and made available to applicable wildlife agency and or Kern County staff on request. Should individuals or active nesting/burrowing sites of the species be present on-site, the project proponent shall confer with the appropriate wildlife agency and commence work only once a plan has been established, approved by the applicable agency, and made available to Kern County staff upon request.” While surveys conducted in support of the DEIR did not document San Joaquin antelope squirrel (SJAS) within the Project site, CDFW would like to note that there is a high

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likelihood that the species could utilize the site over the life of the Project and recommends the Project proponent consult with CDFW to obtain an ITP pursuant to Fish and Game Code section 2081 subdivision (b). In the event the Project proponent does not obtain an ITP, and SJAS are documented during implementation of Mitigation Measure MM 4.4-12, or at any time during construction and operation of the Project, CDFW recommends the following:

Recommended Mitigation Measure 1: SJAS Avoidance Buffer

CDFW recommends a minimum 50 foot no-disturbance buffer be employed around all burrows that could be used by SJAS. If a minimum 50 foot no-disturbance buffer 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: SJAS Take Authorization

If a minimum 50 foot no-disturbance buffer for SJAS is not feasible, CDFW recommends that consultation with CDFW occur to discuss how to implement the Project and avoid take. If take cannot be avoided, take authorization through the acquisition of an ITP, pursuant to Fish and Game Code section 2081 subdivision (b) is necessary to comply with CESA.

San Joaquin Kit Fox

Mitigation Measure 4.4-10 states that, "If signs of San Joaquin Kit Fox are identified on site, the project proponent shall establish appropriate buffers limiting all construction activities. Buffers include (50 Feet) for a potential or atypical den, (100) feet for a known den and (500) feet for a natal or pupping den, unless otherwise specified by the California Department of Fish and Wildlife (CDFW). If required buffers are not possible to protect the species, then the project proponent shall confer with CDFW on the need for take authorization through the acquisition of an incidental take permit, pursuant to Fish and Game Code section 2081 subdivision (d)." While CDFW concurs with this measure for San Joaquin kit fox (SJKF), it is strongly recommended that the Project proponent consult with CDFW to obtain an ITP pursuant to Fish and Game Code section 2081 subdivision (b), due to the high likelihood that SJKF will utilize the Project site, both during construction and during the operations and maintenance period.

Mitigation Measure 4.4-14 states that, "In determining whether SJKF activity could occur within these buffers, the biological monitor would take into account the following:

- Noise level and duration. The noise level and duration of activities would be considered. Loud (e.g., greater than 80 decibels) and sustained (e.g., longer than one hour) activities would be disallowed within the buffer setbacks. Activities with shorter durations and/or lower noise levels may be

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considered with continual observation of the den by the monitor and work stoppage if the biologist detects evidence of disturbance.

- Level of disturbance typically experienced in the location of the den prior to construction. Some areas of the Project (e.g., existing roads or agricultural areas) have been historically subject to human disturbance and dens near these areas are assumed to be accustomed to those previous levels of disturbance. If construction noise and duration are similar to disturbances that would have occurred in the area prior to construction (e.g., vehicular traffic on an existing road), those activities could continue with ongoing monitoring of the den by a biological monitor.
- If construction activities have begun within 100 feet of a potential or atypical den that was determined during preconstruction activities to be inactive when construction began and the den becomes active during construction (i.e., becomes a “known” den), those activities would be allowed to continue at the same intensity as occurred when the den became active. A biological monitor would maintain continual watch on the den while construction activities are conducted within the buffer described above.
- In no case would construction activities, regardless of noise and duration, occur closer than 50 feet from a known or potential/atypical den or 500 feet from a natal/pupping den unless approved by California Department of Fish and Wildlife or United States Fish and Wildlife Service. Evidence that the construction activities were causing negative changes in behavior patterns would cause the biologist to disallow those activities inside the buffer.
- If take of San Joaquin Kit Fox cannot be avoided, the project proponent shall confer with California Department of Fish and Wildlife on the need for take authorization through the acquisition of an incidental take permit, pursuant to Fish and Game Code section 2081 subdivision (b).”

CDFW does not concur with this measure, as allowing certain construction-related activities within the buffers outlined in the “Standardized Recommendations for Protection of the San Joaquin Kit Fox Prior to or During Ground Disturbance” (2011) (USFWS Protocol) has a strong likelihood to result in take. As such, CDFW reiterates the recommendation that the Project proponent consult with CDFW to obtain an ITP pursuant to Fish and Game Code section 2081 subdivision (b) due to the high likelihood that SJKF will utilize the Project site, both during construction and during the operations and maintenance period.

Mitigation Measure 4.4-15 states that, “All fencing installed on the perimeter of the solar project site will be designed to allow for passage of San Joaquin Kit Fox (SJKF), their

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prey and other wildlife, while impeding the passage of larger predators such as coyotes and similar species. Perimeter fencing shall consist of wire fencing, with openings from three (3) to seven (7) inches square and will be installed inverted, with the larger openings at the bottom to allow SJKF to pass through. Chain link fencing may also be used if it is installed with a four (4) to six (6) inch gap from the bottom of the fencing material and shall be knuckled back to form a smooth edge. Alternate designs may also be constructed with documentation of coordination with California Department of Fish and Wildlife (CDFW) and United States Fish and Wildlife.” CDFW concurs with this measure but recommends that the style of fencing selected is the type that is raised four to six inches above ground level and knuckled back to form a smooth edge and permeability for wildlife.

Tipton Kangaroo Rat

Mitigation Measure MM 4.4-13 states that, “Giant kangaroo rat or Tipton kangaroo rat precincts shall be flagged and a 50-foot-wide buffer around the precincts shall be avoided by construction equipment and ground disturbing activities, if feasible.” CDFW strongly recommends that all Tipton kangaroo rat (TKR) burrows be avoided by a 50 foot no-disturbance buffer and if this buffer cannot be maintained, then the Project obtain take authorization, pursuant to Fish and Game Code section 2081 subdivision (b).

Mitigation Measure MM 4.4-13 continues by stating that, “If project personnel are required to drive or operate a vehicle or piece of equipment in the vicinity of a Giant kangaroo rat or Tipton kangaroo rat precinct, they shall avoid driving directly over precinct openings, seed caches, or haystacks, if practicable. If the activity requires that the vehicle travel directly over a precinct (more than simple daily pedestrian activities such as walking in and out of an area to inspect the condition of equipment) for more than 1 hour, then the following procedures shall be implemented:

- A plywood sheet or stronger material board, measuring at least 4 by 8 feet and 1 inch thick, shall be placed over the entire precinct at the start of the activity.
- Any haystacks, seed caches, or other forage stockpiled by the giant kangaroo rat, or the Tipton kangaroo rat on the surface shall be left undisturbed to the maximum extent practicable. If avoidance is not possible, the seed caches and haystacks shall be completely covered by a plywood sheet.
- More than one plywood sheet may be required to cover an area when multiple precincts occur in the vicinity of the activity.

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- Vehicles and equipment shall be allowed to travel over a precinct only when all tires are driving over the plywood surface.
- At the end of the work activity or at the end of each workday, whichever is of a shorter duration, all plywood sheets or stronger boards shall be removed from the precinct(s), and any haystacks, seed caches, or other forage stockpiles that have been covered.
- During daily pedestrian operation and maintenance activities, such as walking within an array to inspect the condition of equipment or performing panel washing, project personnel may walk on and work around precincts; however, entrances or holes in the precinct shall not be stepped on and shall be avoided to prevent damage to or plugging of these entrances, to the extent practicable. If damage to or plugging of the entrances occur, or is likely to occur, and work is scheduled to continue, personnel shall use plywood sheeting or stronger material boards to protect the precinct as described above.”

CDFW does not concur with this portion of the measure, as implementation is likely to result in take. While these are minimization measures that could be incorporated into an ITP, they are not avoidance measures. As such, CDFW reiterates the recommendation that all TKR burrows be avoided by a 50 foot no-disturbance buffer and if this buffer cannot be maintained, then the Project obtain an ITP, pursuant to Fish and Game Code section 2081 subdivision (b).

Swainson’s Hawk

Mitigation Measure 4.4-10 states that, “If signs of Swainson’s hawk nest, beyond those mapped during the pre-construction SWHA surveys, are identified on-site or within 0.5 miles from the project site, the project proponent will confer with California Department of Fish and Wildlife (CDFW) and prepare a Swainson’s hawk nesting construction plan. The purpose of this plan would be to identify what level of monitoring would be required, what types of construction activities can occur and what locations within the project site and what avoidance setbacks need to be established, if any, to minimize impacts to an active Swainson’s hawk nest.” As mentioned previously in CDFW’s December 27, 2022, Notice of Preparation (NOP) comment letter to this Project, it is recommended that in the event an active Swainson’s hawk (SWHA) nest is detected, and a ½-mile no-disturbance buffer is not feasible, consultation with CDFW is warranted to discuss how to implement the project and avoid take, and if take cannot be avoided, take authorization through the acquisition of an ITP, pursuant to Fish and Game Code section 2081 subdivision (b) is necessary. As multiple active SWHA nests were documented within 0.5 mile of the Project during the biological studies conducted in

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support of the DEIR, CDFW strongly recommends the Project proponent consult with CDFW to obtain an ITP pursuant to Fish and Game Code section 2081 subdivision (b).

Mitigation Measure 4.4-11 states that, "The project proponent shall mitigate for the loss of Swainson's hawk nesting and foraging habitat at a ratio of 0.5:1 based on the total approved area of the project site. Mitigation land may be nested with other compensatory lands provided it meets the necessary biological requirements and as determined by appropriate wildlife agency." CDFW does not concur that this mitigation ratio is sufficient to mitigate for the loss of nesting and foraging habitat and recommends the following:

Recommended Mitigation Measure 3: 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. 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

Mitigation Measure 4.4-7 states that, "Within one calendar year of the or start of ground disturbance activities, a qualified biologist shall conduct protocol level surveys for the Blunt-Nosed Leopard (BNLL) to verify previous survey results that no BNLL are located on the project site. The required surveys shall be provided to the Kern County Planning and Natural Resources Department, the U.S Fish and Wildlife Service and the California Department of Fish and Wildlife. If no sign of the species is identified, no further action is required. If the species is identified on-site, the project proponent shall confer with the appropriate wildlife agency and, if take cannot be avoided, obtain an Incidental Take Permit pursuant to both Section 10(a)(1) of the federal Endangered Species Act and SB 147." While CDFW concurs with this measure for blunt-nosed leopard lizard (BNLL), it is strongly recommended that the Project proponent engage in early consultation with CDFW regarding the potential to obtain an ITP for BNLL pursuant to Fish and Game

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Code section 2081 subdivision (b), due to the high likelihood that BNLL will utilize the Project site over the life of the Project.

Mitigation Measure 4.4-8 states that, "Project actions in areas where BNLL are located shall be restricted to the species active period (April to early November) to ensure that no aestivating BNLL in burrows are impacted while in their burrows. In conjunction with CDFW or other involved agencies, sensitive areas shall be established and protected with appropriate signage." CDFW does recognize that restricting work within occupied BNLL habitat to the species active period would be sufficient to prevent take, as they utilize burrows year round. To avoid take, construction and operations activities would have to avoid all observed lizards and potential occupied burrows by a distance of no less than the distance that BNLL are known or expected to travel within their home range, based on telemetry, mark-recapture, or other data, and regardless of the time of year. For complete avoidance within BNLL occupied habitat, CDFW recommends the following:

Recommended Mitigation Measure 4: 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 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, the numerous historical records of BNLL, and the likelihood that BNLL may utilize the Project site over the life of the Project, CDFW strongly reiterates the recommendation that the Project proponent consult with CDFW on the potential to obtain an ITP pursuant to Fish and Game Code section 2081 subdivision (b) for BNLL.

Crotch's Bumble Bee

Mitigation Measure 4.4-17 states that, "During the blooming period immediately prior to commencement of project ground disturbing activities, areas within the project site containing one or more of the following habitat requisites shall be surveyed for Crotch's bumble bee by a qualified biologist: flowering vegetation, potential preferred nectar plants, small mammal burrows, bunch grasses, thatch, brush piles, old bird nests, or dead trees. A minimum of two surveys shall be completed between the hours of 0800 and 1600 when temperatures are between 65°F and 90°F, and will not be conducted

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during inclement weather conditions (e.g., foggy, raining, drizzling, or sustained winds greater than 8 mph). Surveyors will photograph potential Crotch's bumble bees from various angles to ensure recordation of key identifying characteristics. Should a Crotch's bumble bee be observed, ground disturbing work shall not proceed until consultation with CDFW related to avoidance or take of Crotch's bumble bee on-site is completed. If Crotch's bumble bee is determined to be present, compensatory lands used as mitigation for Crotch's bumble bee will include longterm [sic] conservation at a ratio of not less than 0.5 acre per acre of potentially suitable habitat impacted by the project." While CDFW concurs with conducting surveys for Crotch's bumble bee (CBB) the survey season immediately prior to construction, to ensure the Project site is surveyed sufficiently to determine presence or absence and adequately mitigate for the species, CDFW recommends the following:

Recommended Mitigation Measure 5: CBB Surveys

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

Recommended Mitigation Measure 6: 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 construction warrants consultation with CDFW to discuss how to avoid take.

Recommended Mitigation Measure 7: CBB Take Authorization

If CBB is identified during surveys or at any time during Project construction, consultation with CDFW is warranted to determine if the Project can avoid take. If take cannot be avoided, take authorization prior to any ground disturbing activities is warranted. Take authorization would occur through issuance of an ITP by CDFW, pursuant to Fish and Game Code section 2081(b).

Burrowing Owl (BUOW)

Mitigation Measure 4.4-10 states that, "If required buffers are infeasible, then the project proponent shall prepare a Burrowing Owl and American Badger Exclusion Plan. Any burrow and/or den exclusion would be conducted by a qualified biologist with burrowing

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owl burrows replaced at a 1:1 ratio. No burrowing owl burrow exclusion is permitted during breeding season (February 1 - August 31) unless a qualified biologist verifies through noninvasive methods that (1) the birds have not begun egg laying and incubation, (2) a previously active nest has failed and re-nesting is highly unlikely, or (3) all juveniles from the occupied burrow are foraging independently and capable of independent survival.” CDFW concurs with this portion of Mitigation Measure 4.4-10 but recommends that burrow exclusion occur during the non-breeding season only, before breeding behavior is exhibited.

Other State Species of Special Concern

Mitigation Measures MM 4.4-2, MM 4.4-3, MM 4.4-9, and MM 4.4-12 are provided to mitigate for impacts to Tulare grasshopper mouse, San Joaquin coachwhip, and western spadefoot. While CDFW concurs with the measures for these species, CDFW does not concur with the DEIR determination of absence for coast horned lizard. Coast horned lizards are known to occur in a wide variety of habitat types with fine soils, shrub cover, and burrows. As these habitat features are present within portions of the Project site, CDFW recommends the following for coast horned lizard:

Recommended Mitigation Measure 8: Other State Species of Special Concern Surveys

CDFW recommends that a qualified biologist conduct focused surveys for coast horned lizard and their requisite habitat features prior to Project implementation to evaluate potential impacts resulting from ground- and vegetation disturbance.

Additionally, no measures were included to implement avoidance buffers for Tulare grasshopper mouse, coast horned lizard, San Joaquin coachwhip, and western spadefoot when documented during surveys. As such, CDFW recommends the following:

Recommended Mitigation Measure 9: Other State Species of Special Concern Avoidance Buffer

Avoidance of Tulare grasshopper mouse, coast horned lizard, San Joaquin coachwhip, and western spadefoot whenever possible is encouraged via delineating and observing a 50 foot no-disturbance buffer around burrows where these species may be present. In addition, for western spadefoot, a 50 foot no-disturbance buffer around ephemeral pools (wet or dry, regardless of size) is recommended.

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Special-Status Plant Species

Mitigation Measure MM 4.4-6 states that, “No more than thirty (30) days prior to the start of ground disturbance activities or issuance of any grading or building permits, decommissioning of the project site, a qualified biologist knowledgeable on the identification of rare plant species shall conduct a preconstruction plant survey of areas of proposed disturbance within the project site and 100- foot buffer (where legally accessible) to determine if any special-status plant species are present. If special-status plants are identified on-site, their locations shall be mapped and the project proponent shall confer with CDFW or USFWS as required by applicable law to facilitate salvage or seed collection.” While CDFW concurs with this measure, it is recommended that preconstruction plant species surveys be timed during the appropriate blooming period the survey season immediately prior to construction to adequately identify the presence of the special-status species documented during the 2022 botanical surveys conducted in support of the DEIR.

Nesting Birds

The DEIR notes that nesting birds have the potential to occur within the Project site; however, it does not appear that any mitigation measures were proposed to protect nesting birds during the breeding season (February 1 – September 15). As such, CDFW recommends the following:

Recommended Mitigation Measure 10: 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 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 11: 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 cease and that

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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 GKR, SJKF, TKR, BNLL, California jewelflower, Kern mallow, and San Joaquin woollythreads. 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.

Lake and Streambed Alteration: Based on the information provided in the DEIR, the Project area, including the OPGW line, contains multiple streams, including the Kern River Channel. Project activities may be subject to CDFW's regulatory authority pursuant to Fish and Game Code section 1600 et seq. Fish and Game Code section 1602 requires an entity to notify CDFW prior to commencing any activity that may (a) substantially divert or obstruct the natural flow of any river, stream, or lake; (b) substantially change or use any material from the bed, bank, or channel of any river, stream, or lake (including the removal of riparian vegetation); (c) deposit debris, waste or other materials that could pass into any river, stream, or lake. "Any river, stream, or lake" includes those that are ephemeral, intermittent, or episodic, as well as those that are perennial.

CDFW is required to comply with CEQA in the issuance of a Lake or Streambed Alteration Agreement; therefore, if the DEIR approved for the Project does not adequately describe the Project and its impacts to lakes or streams, a subsequent CEQA analysis may be necessary for LSA Agreement issuance. For information on notification requirements, please refer to CDFW's website (<https://wildlife.ca.gov/Conservation/LSA>) or contact CDFW staff in the Central Region Lake and Streambed Alteration Program at (559) 243-4593 or R4LSA@wildlife.ca.gov.

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Project Alternatives Analysis: CDFW recommends that the information and results obtained from the biological technical surveys, studies, and analyses conducted in support of the Project's DEIR be used to develop and modify the Project's alternatives to avoid and minimize impacts to biological resources to the maximum extent possible. When efforts to avoid and minimize have been exhausted, CDFW advises that remaining impacts to sensitive biological resources be mitigated to reduce impacts to a less than significant level, if feasible.

Cumulative Impacts: Currently, the DEIR 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 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: GKR, SJAS, SJKF, TKR, golden eagle (*Aquila chrysaetos*), SWHA, BNLL, CBB, American badger, BUOW, Tulare grasshopper mouse, Le Conte's thrasher, loggerhead shrike, northern harrier, San Joaquin coachwhip, western spadefoot, California horned lark, California jewelflower, San Joaquin woollythreads, alkali sink goldfields, Coulter's goldfields, Horn's milk-vetch, Kern mallow, Kings gold, lesser saltscale, lost hills crownscale, Munz's tidy-tips, and recurved larkspur. 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

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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

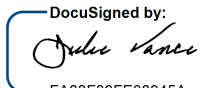
The Project, as proposed, would have an impact on fish and/or wildlife, and assessment of filing fees is necessary. Fees are payable upon filing of the Notice of Determination by the Lead Agency and serve to help defray the cost of environmental review by CDFW. Payment of the fee is required in order 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).

CONCLUSION

CDFW appreciates the opportunity to comment on the DEIR to assist Kern County Planning and Natural Resources 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:

FA83F09FE08945A...
Julie A. Vance
Regional Manager

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REFERENCES

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 Wildlife. 2023. Survey considerations for California Endangered Species Act candidate bumble bee species. California Department of Fish and Wildlife, 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, CA, USA.

Attachment 1

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

PROJECT: Pelican's Jaw Hybrid Solar Project

SCH No.: 2022110558

RECOMMENDED MITIGATION MEASURE	STATUS/DATE/INITIALS
<i>Before Disturbing Soil or Vegetation</i>	
SJAS	
Recommended Mitigation Measure 2: SJAS take authorization	
SWHA	
Recommended Mitigation Measure 3: SWHA foraging habitat mitigation	
CBB	
Recommended Mitigation Measure 5: CBB surveys	
Recommended Mitigation Measure 7: CBB take authorization	
Other State Species of Special Concern	
Recommended Mitigation Measure 8: Other state species of special concern surveys	
Nesting Birds	
Recommended Mitigation Measure 10: Nesting bird surveys prior to construction	
<i>During Construction</i>	
SJAS	
Recommended Mitigation Measure 1: SJAS avoidance buffer	
BNLL	
Recommended Mitigation Measure 4: BNLL avoidance buffer	
CBB	
Recommended Mitigation Measure 6: CBB avoidance buffer	
Other State Species of Special Concern	
Recommended Mitigation Measure 9: Other state species of special concern avoidance buffer	
Nesting Birds	
Recommended Mitigation Measure 11: Nesting bird monitoring and/or avoidance buffer	