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December 27, 2022

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Subject: **Pelican's Jaw Hybrid Solar Project by Pelican's Jaw Solar, LLC**
Notice or Preparation (NOP)
State Clearinghouse No. 2022110558

Dear Mathew Hall:

The California Department of Fish and Wildlife (CDFW) received a Notice of Preparation (NOP) for an Environmental Impact Report (EIR) 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. While the comment period may have ended, CDFW would appreciate if you will still consider our comments.

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,

[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.

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 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 species of birds, mammals, amphibians, reptiles, and fish designated by statute as "fully protected" pursuant to Fish and Game Code sections 3511, 4700, 5050, and 5515. Take of any fully protected species is prohibited and CDFW cannot authorize their incidental take except as specifically provided for in Fish and Game Code; none of those specific exceptions are applicable to this project.

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.

PROJECT DESCRIPTION SUMMARY

Proponent: Pelican's Jaw Solar, LLC

Objective: The Project proposes to construct and operate a photovoltaic (PV) solar facility which would generate up to 500 megawatts (MW) of renewable electrical energy with a battery energy storage system (BESS) capable of storing approximately 2,000 megawatt-hours (MWh) of storage capacity. Construction is anticipated to occur in three phases, with the first phase consisting of the installation of 300 MW of PV solar and the installation of up to 1,000 MWh of battery energy storage. The second and third phases would consist of the installation of 200 MW of photovoltaic solar (phase two) and the installation of up to 1,000 MWh of battery energy storage (phase three). The proposed Project includes the installation of PV panels, a single-axis tracker system, inverters and transformers, electrical cabling and communication lines, on-site switchgear, a collector substation, a generation interconnection (gen-tie) line, a BESS, access roads, a security fence, an operations and maintenance (O&M) facility, and a supervisory control and data acquisition (SCADA) system. The Project 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. The PG&E switching station would be located on-site, within the Project boundaries.

Location: The project site is located on 3,943 acres of private property in unincorporated Kern County, California, adjacent to the southern border of Kings County with direct access from Interstate 5 (I-5) located approximately 2 miles to the west. The project site is situated within portions of Sections 4, 5, 6, 8, 9, 15, 16, and 22 of Township 25 South, Range 21 East, San Bernardino Base and Meridian (SBB&M). The project site is generally bordered by Kern and Kings County line to the north, Lost Hills Road to the east, Twisselman Road to the south, and I-5 to the west.

Timeframe: Construction would begin in the first quarter of 2024 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 Draft EIR.

Aerial imagery of the Project boundary and its surroundings show the area contains several natural habitats including annual grassland 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 (CNDDB) records, and the surrounding habitat, several special status species could potentially be impacted by Project activities.

The Project area is within the geographic range of 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 and federally endangered Tipton kangaroo rat (*Dipodomys nitratoides nitratoides*); the State fully protected golden eagle (*Aquila chrysaetos*); the State threatened Swainson's hawk (*Buteo swainsoni*); the State threatened tricolored blackbird (*Agelaius tricolor*); the State fully protected white-tailed kite (*Elanus leucurus*); the State and federally endangered blunt-nosed leopard lizard (*Gambelia sila*); the State candidate for listing Crotch bumble bee (*Bombus crotchii*); the State species of special concern and federally endangered Buena Vista Lake ornate shrew (*Sorex ornatus relictus*); the State species of special concern American badger (*Taxidea taxus*), burrowing owl (*Athene cunicularia*), pallid bat (*Antrozous pallidus*), spotted bat (*Euderma maculatum*), Townsend's big-eared bat (*Corynorhinus* townsendii), Tulare grasshopper mouse (*Onychomys torridus tularensis*), western mastiff bat (*Eumops perotis californicus*), Le Conte's thrasher (*Toxostoma lecontei*), loggerhead shrike (*Lanius ludovicianus*), long-eared owl (*Asio otus*), mountain plover (*Charadrius montanus*), northern harrier (*Circus hudsonius*), coast horned lizard (*Phrynosoma blainvillii*), San Joaquin coachwhip (*Masticophis flagellum ruddocki*), and western spadefoot (*Spea hammondii*); and the State watch list species California horned lark (*Eremophila alpestris actia*).

Additionally, the Project area is within the geographic range of several special status plant species including the State and Federally Endangered and 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 coronata var. vallicola*), Munz's tidy-tips (*Layia munzii*), and recurved larkspur (*Delphinium recurvatum*). Finally, the Project is within the geographic range of many migratory and non-migratory nesting birds.

Giant Kangaroo Rat (GKR)

The Project site is within the known geographic range of GKR and there is a historical occurrence approximately 7.5 miles northwest of the Project (CDFW 2022). GKR are known to inhabit areas with sandy-loam soils with gentle slopes vegetated with annual

grasses and scattered shrubs (ESRP 2020). As noted in the NOP, the Project site contains a mix of native and non-native grasses and shrubs and has not had active crop cultivation for approximately 10 years. As such, GKR have the potential to occupy the habitats within the Project site.

CDFW recommends that a qualified wildlife biologist conduct focused protocol-level trapping surveys for GKR as part of the biological studies conducted in support of the Draft EIR. Prior to conducting these surveys, CDFW recommends that a trapping plan for determining presence of GKR and surveyor qualifications be submitted to and approved by CDFW. If surveys indicate the presence or potential presence of GKR, consultation with the CDFW is recommended for guidance on the development of mitigation measures such as take avoidance, minimization, and mitigation.

San Joaquin Antelope Squirrel (SJAS)

The Project site is within the known geographic range of SJAS, a historical occurrence was documented within the Project area (CDFW 2022), and SJAS are known to occupy habitat on the Semitropic Ecological Reserve approximately 3 miles south of the Project. Suitable SJAS habitat includes areas of grassland, upland scrub, and alkali sink habitats that contain requisite habitat elements, such as small mammal burrows. As noted in the NOP, the Project site contains a mix of native and non-native grasses and shrubs and has not had active crop cultivation for approximately 10 years. As such, SJAS have a high potential to occupy the habitats within the Project site.

As SJAS have a high potential to occupy the Project site and have been documented within the Project vicinity, CDFW recommends that a qualified biologist conduct focused daytime visual surveys for SJAS in areas of suitable habitat as part of the biological studies conducted in support of the Draft EIR. CDFW also recommends that these surveys are conducted using line transects with 10- to 30-meter spacing of Project areas and a 50-foot buffer around those areas. CDFW further advises that these surveys be conducted between April 1 and September 20, during daytime temperatures between 68° and 86° F (CDFG 1990), to maximize detectability. In addition to the focused SJAS daytime surveys, CDFW recommends the Draft EIR include the following measures:

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 Incidental Take Permit (ITP), pursuant to Fish and Game Code section 2081 subdivision (b) is necessary to comply with CESA.

San Joaquin Kit Fox (SJKF)

The Project site is within the known geographic range of SJKF, multiple historical and recent occurrences have been documented within the immediate project vicinity (CDFW 2022), and SJKF are known to occupy habitat on the Semitropic Ecological Reserve approximately 3 miles south of the Project. SJKF den in a variety of areas such as arid grassland and alkali scrub/shrub habitats in open areas with sandy soils (Grinnel et al. 1937), agricultural and fallow/ruderal habitat, and dry stream channels, and populations can fluctuate over time. SJKF may be attracted to Project areas due to the type and level of ground disturbing activities and the loose, friable soils resulting from intensive ground disturbance. Based on aerial imagery and the information provided in the NOP, most of the Project site contains suitable habitat for SJKF denning and foraging.

As SJKF have a high potential to den and/or forage within the Project site and have been documented within the Project vicinity, CDFW recommends that a qualified biologist assess the presence/absence of SJKF by having qualified biologists conduct focused surveys to detect SJKF and their sign in all Project areas and a 500-foot buffer of Project areas as part of the biological studies conducted in support of the Draft EIR. In addition to the focused SJKF surveys, CDFW recommends the Draft EIR include the following measures:

Recommended Mitigation Measure 3: 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 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 4: SJKF Take Authorization
If the no-disturbance buffers outlined in the USFWS Protocol for SJKF 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.

Tipton Kangaroo Rat (TKR)

The Project site is within the known geographic range of TKR, multiple historical and recent occurrences have been documented within the immediate project vicinity (CDFW 2022), and TKR are known to occupy habitat on the Semitropic Ecological Reserve approximately 3 miles south of the Project. TKR are known to inhabit areas of grassland, upland scrub, and alkali sink habitats that contain requisite habitat elements, such as small mammal burrows. As noted in the NOP, the Project site contains a mix of native and non-native grasses and shrubs and has not had active crop cultivation for approximately 10 years. As such, TKR have a high potential to occupy the habitats within the Project site.

As TKR have a high potential to occupy the Project site and have been documented within the Project vicinity, CDFW recommends that a qualified wildlife biologist conduct focused protocol-level trapping surveys for TKR as part of the biological studies conducted in support of the Draft EIR. Prior to conducting these surveys, CDFW recommends that a trapping plan for determining presence of TKR and surveyor qualifications be submitted to and approved by CDFW. If surveys indicate the presence or potential presence of TKR, consultation with the CDFW is recommended for guidance on the development of mitigation measures such as take avoidance, minimization, and mitigation.

In addition to the focused TKR surveys, CDFW recommends the Draft EIR include the following measures:

Recommended Mitigation Measure 5: TKR Avoidance Buffer
CDFW recommends a minimum 50 foot no-disturbance buffer be employed around all burrows that could be used by TKR. 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 6: TKR Take Authorization
If a minimum 50 foot no-disturbance buffer for TKR 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.

Fully Protected Raptors

The fully protected golden eagle and white-tailed kite have the potential to nest and/or forage in the Project vicinity (CDFW 2022). CDFW recommends that a qualified biologist conduct a habitat assessment for fully protected raptors within the Project area

and a 0.5-mile buffer surrounding the Project area as part of the biological studies conducted in support of the Draft EIR. If suitable habitat is determined to be present, CDFW recommends that focused surveys be conducted for golden eagle and white-tailed kite, and that surveys be conducted in accordance with protocols developed by the United States Fish and Wildlife Service (USFWS 2010) for golden eagle, as part of the biological technical studies. If surveys indicate the presence or potential presence of fully protected raptors, consultation with the CDFW is recommended for guidance on the development of take avoidance measures.

Swainson's Hawk (SWHA)

The Project is within the known geographic range of SWHA, and a recent occurrence has been documented approximately 1.3 miles west of the Project site (CDFW 2022). SWHA are known to breed within the Central Valley of California and prefer to nest and forage in alfalfa, fallow fields, field crops, and grassland habitats with a sufficient source of small mammals (CDFG 1994). Based on aerial imagery and the information provided in the NOP, most of the Project site contains suitable habitat for SWHA foraging. In addition, there are trees and structures located within and adjacent to the Project area that may provide suitable nesting habitat.

As SWHA have a high potential to use the Project site and have been documented within the Project vicinity, CDFW recommends that a qualified wildlife biologist conduct surveys for nesting SWHA following the entire survey methodology developed by the SWHA Technical Advisory Committee (SWHA TAC 2000) as part of the biological technical studies conducted in support of the Draft EIR.

In addition to conducting SWHA surveys, CDFW recommends the Draft EIR include the following measures:

Recommended Mitigation Measure 7: SWHA Surveys Prior to Construction
Depending on the time between the initial survey efforts conducted in support of the Draft EIR and project construction, CDFW recommends that additional surveys, following the survey methodology developed by the SWHA Technical Advisory Committee, be repeated the survey season immediately prior to construction.

Recommended Mitigation Measure 8: SWHA Avoidance Buffer
If Project-specific activities will take place during the SWHA nesting season (i.e., March 1 through September 15), and active SWHA nests are present, CDFW recommends a minimum ½-mile no-disturbance buffer be delineated and maintained around each nest, regardless of whether it was detected by surveys or observed incidentally. These buffers would 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, to prevent nest abandonment and other take of SWHA as a result of Project activities.

Recommended Mitigation Measure 9: SWHA Take Authorization
CDFW also recommends that in the event an active 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. 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.

Recommended Mitigation Measure 10: SWHA Foraging Habitat Mitigation
Finally, 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 ¾ 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 ½ acre of HM land for each acre of development is advised.

Tricolored blackbird (TRBL)

The Project site is within the known geographic range of TRBL and multiple historical and recent occurrences have been documented within the immediate project vicinity (CDFW 2022). TRBL breed within the vicinity of fresh water, primarily in marshy areas. Important sites for nesting colonies include heavy growths of cattails, tules, thistles, willows, blackberries, mustard, nettles, and salt cedar. They typically forage within flooded lands, grassy fields, and margins of ponds (Grinnel and Miller, 1944). Based on aerial imagery and the information provided in the NOP, the Kern River Channel located on the eastern portion of the Project site could contain habitat suitable for TRBL nesting. In addition, the grassland habitats within the Project site could provide potential foraging habitat.

CDFW recommends that a qualified biologist conduct a habitat assessment as part of the biological technical studies conducted in support of the Draft EIR. If potentially suitable habitat is identified, consultation with CDFW is recommended for guidance on

focused survey methods and mitigation measures such avoidance, minimization, and mitigation.

Blunt-nosed Leopard Lizard (BNLL)

The Project site is within the known geographic range of BNLL, a historical occurrence was documented within the Project area (CDFW 2022), and BNLL are known to occupy habitat on the Semitropic Ecological Reserve approximately 3 miles south of the Project. Suitable blunt-nosed leopard lizard (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 NOP, the Project site contains a mix of native and non-native grasses and shrubs and has not had active crop cultivation for approximately 10 years. As such, BNLL could potentially occupy the habitats within the Project site.

As BNLL have the potential to occupy the Project site and have been documented within the Project vicinity, CDFW recommends that a qualified biologist conduct focused protocol surveys in accordance with the "Approved Survey Methodology for the Blunt-nosed Leopard Lizard" (CDFG 2019) as part of as part of the biological technical studies conducted in support of the Draft EIR. This survey protocol, designed to optimize BNLL detectability, reasonably assures CDFW that ground disturbance will not result in take of this fully protected species.

In addition to conducting BNLL surveys, CDFW recommends the Draft EIR include the following measures:

Recommended Mitigation Measure 11: BNLL Surveys Prior to Construction
Depending on the time between the initial survey efforts conducted in support of the Draft EIR and project construction, CDFW recommends that additional surveys, following the "Approved Survey Methodology for the Blunt-nosed Leopard Lizard" (CDFG 2019) survey methodology be repeated the survey season immediately prior to construction.

Recommended Mitigation Measure 12: BNLL Take Avoidance
As mentioned above, CDFW cannot authorize take of BNLL, incidental or otherwise, as the species is a State fully protected species. Therefore, BNLL detection during protocol level surveys warrants consultation with CDFW to discuss how to implement ground-disturbing activities and avoid take.

Crotch bumble bee (CBB)

CBB was re-listed as an endangered candidate species under CESA (Fish & G. Code, § 2050 et seq.) on September 30th, 2022. During the candidacy period, consistent with CEQA Guidelines section 15380, the status of the CBB qualifies it as an endangered, rare, or threatened species under CEQA. It is unlawful to engage in take of listed or candidate species except as authorized pursuant to CESA. Under Fish and Game Code section 86, take means to hunt, pursue, catch, capture, or kill, or to attempt to hunt pursue, catch, capture, or kill. Consequently, take of CBB during the status review period is prohibited unless authorization pursuant to CESA (2081(b)) is obtained.

The Project site is within the known geographic range of CBB and there are several recent observations surrounding the Project area (CAS 2022). 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. As noted in the NOP, the Project site contains a mix of native and non-native grasses and shrubs and has not had active crop cultivation for approximately 10 years. As such, CBB could potentially use the habitats within the Project site

CDFW recommends a qualified biologist conduct a habitat assessment as part of the biological technical studies conducted in support of the Draft EIR to determine if the Project area 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. If potentially suitable habitat is identified, coordination with CDFW is recommended for guidance on developing focused CBB survey methodology to be conducted as part of the biological technical studies.

American Badger (AMBA)

The Project site is within the known geographic range of AMBA and a historical occurrence has been documented approximately 7.0 miles east of the Project site (CNDDB 2022). AMBA occupy 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). Based on aerial imagery and the information provided in the NOP, most of the Project site contains suitable habitat for AMBA denning and foraging.

As AMBA have the potential to den and/or forage within the Project site, CDFW recommends that a qualified biologist assess the presence/absence of AMBA by conducting a focused field survey in all areas of potentially suitable habitat as part of the biological studies conducted in support of the Draft EIR. If surveys indicate the

presence or potential presence of AMBA, consultation with the CDFW is recommended for guidance on mitigation measures such as avoidance, minimization, and mitigation.

Burrowing Owl (BUOW)

The Project site is within the known geographic range of BUOW and historical and recent occurrences have been documented approximately 6.0 miles to the east and south of the Project site (CNDDB 2022). BUOW inhabit open grasslands and desert scrublands containing small mammal burrows, a requisite habitat feature used by BUOW for nesting and cover. Based on aerial imagery and the information provided in the NOP, most of the Project site contains suitable habitat for BUOW nesting and foraging.

As BUOW have the potential to nest and/or forage within the Project site, 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) as part of the biological studies conducted in support of the Draft EIR. If surveys indicate the presence or potential presence of burrowing owl, consultation with CDFW is recommended for guidance on mitigation measures such as avoidance, minimization, and mitigation.

Bats

The Project site is within the known geographic range of several species of native bat, including species of special concern (SSC) pallid bat, spotted bat, Townsend's big-eared bat, and western mastiff bat. Bats are known to roost in mines, caves, rocky outcrops, bridges, trees, and buildings that provide the required localized climatic conditions and surrounding foraging opportunities needed. The Project site may contain suitable habitat for roosting and likely contains suitable habitat for foraging.

To evaluate Project-related impacts on bats, CDFW recommends that a general habitat and roosting assessment for bats be conducted as part of the biological technical studies conducted in support of the Draft EIR.

Other State Species of Special Concern

The Project site is within the known geographic range of SSC Buena Vista Lake ornate shrew, Tulare grasshopper mouse, coast horned lizard, San Joaquin coachwhip, and western spadefoot and these species have been documented within the areas surrounding the Project (CNDDB 2022).

To evaluate Project-related impacts to these species, CDFW recommends that a general habitat assessment be conducted as part of the biological technical studies conducted in support of the Draft EIR.

Other Special-Status Plant Species

The Project site is within the known geographic range of several special status plant species including California jewelflower, Kern mallow, 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, recurved larkspur, and these species were documented historically within the Project vicinity (CDFW 2022). The Project site may contain suitable habitat for special status plant species, including the species mentioned above.

CDFW recommends that the Project site(s) be surveyed for special status plants by a qualified botanist following the "Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Natural Communities" (CDFW 2018) as part of the biological technical studies conducted in support of the Draft EIR. This protocol, which is intended to maximize detectability, includes the identification of reference populations to facilitate the likelihood of field investigations occurring during the appropriate floristic period. If surveys indicate the presence or potential presence of special status plants, consultation with CDFW is recommended for guidance on mitigation measures such as avoidance, minimization, and mitigation.

Nesting Birds

The Project site is within the known geographic range of several species of migratory and non-migratory birds, including SSC Le Conte's thrasher, loggerhead shrike, long-eared owl, mountain plover, and northern harrier, and watch list species California horned lark (CDFW 2022). The Project site may contain suitable habitat for an abundance of nesting migratory and non-migratory bird species, including the species mentioned above.

To evaluate Project-related impacts on nesting birds, CDFW recommends that a general habitat assessment for nesting birds be conducted as part of the biological technical studies conducted in support of the Draft EIR.

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 the GKR, SJKF, TKR, BNLL, Buena Vista Lake ornate shrew, California jewelflower, Kern mallow, 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 aerial imagery, the Project area appears to contain features indicating multiple streams and drainages may be present. The NOP states a determination of potential federal and State jurisdiction features will be conducted as part of the EIR. If streams, swales, or drainages occur on the Project site, 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 Draft EIR 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. .

Artificial Lighting: Installation of outdoor artificial night lighting can disrupt the circadian rhythms of many wildlife species. Many species use photoperiod cues for communication, determining when to begin foraging, thermoregulation behavior, and migration (Longcore and Rich 2004, Miller 2006, Nightingale et al. 2006, Perry et al. 2008, Stone et al. 2009). Phototaxis, a phenomenon which results in attraction and movement towards light, can disorient, entrap, and temporarily blind wildlife species that experience it (Longcore and Rich 2004). Project activities could result in disruption of wildlife behavior, inadvertent injury, or mortality.

CDFW recommends that the Draft EIR for the Project include an analysis of artificial lighting as it relates to biological resources and incorporate enforceable mitigation measures to decrease the impacts of artificial outdoor lighting on wildlife species. Potentially feasible mitigation measures include motion sensitive lighting; mounting light fixtures as low as possible to minimize light trespass; use of light fittings that direct and confine the spread of light downward; and use of long-wavelength light sources. In addition, CDFW recommends that lighting is not installed in ecologically sensitive areas

(e.g., streams, wetlands, and habitat used by special status species, such as nesting/roosting sites and riparian corridors) and the use of the white/blue wavelengths of the light spectrum be avoided.

Wildlife Movement and Connectivity: The Project area supports significant biological resources and contains habitat connections and supports movement across the broader landscape, sustaining both transitory and permanent wildlife populations. CDFW recommends that on-site features that contribute to habitat connectivity should be evaluated and maintained. Aspects of the Project that could create physical barriers to wildlife movement, including direct or indirect Project-related activities, should be identified, and addressed in the Draft EIR.

Project Alternatives Analysis: CDFW recommends that the information and results obtained from the biological technical surveys, studies, and analysis conducted in support of the Project's Draft EIR 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: 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). Cumulative impacts are recommended to be analyzed 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 also be identified and mapped for each resource being analyzed and utilized for this analysis. CDFW recommends closely evaluating the need for a cumulative impacts analysis for the following species as part of the Draft EIR due to these species being in poor or declining health or at risk: GKR, SJAS, SJKF, TKR, golden eagle, SWHA, TRBL, WTKI, BNLL, CBB, Buena Vista Lake ornate shrew, American badger, BUOW, pallid bat, spotted bat, Townsend's big-eared bat, Tulare grasshopper mouse, western mastiff bat, Le Conte's thrasher, loggerhead shrike, long-eared owl, mountain plover, northern harrier, coast horned lizard, 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 CNDDB. The CNDDB field survey form can be found at the following link: https://www.wildlife.ca.gov/Data/CNDDB/Submitting-Data. The completed form can be mailed electronically to CNDDB at the following email address: CNDDB@wildlife.ca.gov. The types of information reported to CNDDB can be found at the following link: https://www.wildlife.ca.gov/Data/CNDDB/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 NOP 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:
Gerald Hatler
37BF80A1646F41C...

Gerald Hatler for Julie A. Vance
Regional Manager

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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
Before Disturbing Soil or Vegetation	
SJAS	
Recommended Mitigation Measure 2: SJAS take authorization	
SJKF	
Recommended Mitigation Measure 4: SJKF take authorization	
TKR	
Recommended Mitigation Measure 6: TKR take authorization	
SWHA	
Recommended Mitigation Measure 7: SWHA surveys prior to construction	
Recommended Mitigation Measure 9: SWHA take authorization	
Recommended Mitigation Measure 10: SWHA foraging habitat mitigation	
BNLL	
Recommended Mitigation Measure 11: BNLL surveys prior to construction	
Recommended Mitigation Measure 12: BNLL take avoidance	
During Construction	
SJAS	
Recommended Mitigation Measure 1: SJAS avoidance buffer	
SJKF	
Recommended Mitigation Measure 3: SJKF avoidance buffer	
TKR	
Recommended Mitigation Measure 5: TKR avoidance buffer	
SWHA	
Recommended Mitigation Measure 8: SWHA avoidance buffer	