



South Coast Region
3883 Ruffin Road
San Diego, CA 92123
(858) 467-4201
www.wildlife.ca.gov

Governor's Office of Planning & Research



DEC 08 2020

STATE CLEARINGHOUSE

December 7, 2020

Susan Harris
Planning and Development Services
County of San Diego
5510 Overland Avenue, Suite 310
San Diego, CA 92123
Susan.Harris@sdcounty.ca.gov

Subject: Comments on the Draft Environmental Impact Report for the JVR Energy Park Project, SCH #2019039044

Dear Ms. Harris:

The California Department of Fish and Wildlife (CDFW) has reviewed the above-referenced Draft Environmental Impact Report (DEIR) for the JVR Energy Park Project.

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, we appreciate the opportunity to provide comments regarding those aspects of the Project that the 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's ROLE

The 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; California Environmental Quality Act [CEQA] Guidelines § 15386, subd. (a).) The 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, the 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.

The CDFW is also a Responsible Agency under CEQA. (Pub. Resources Code, § 21069; CEQA Guidelines, § 15381.) The CDFW may need to exercise regulatory authority as provided by the Fish and Game Code. As proposed, for example, the Project may be subject to the 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.

The CDFW also administers the Natural Community Conservation Planning (NCCP) program. The County of San Diego (County) participates in the NCCP program by implementing its

Susan Harris
County of San Diego, Planning and Development Services
December 7, 2020
Page 2 of 35

approved Multiple Species Conservation Program (MSCP) and the planning agreement for the draft East County Plan of which the Mountain Empire Subregional Plan is a part.

Project Description

Objective: The JVR Energy Project would entail the operation and construction of a 90-megawatt (MW) solar energy facility and a 20-MW energy storage system. The Project would include approximately 300,000 photovoltaic modules on single axis trackers, an underground electrical collection system, a substation, an overhead gen-tie line, and access roads. The development footprint of the proposed facilities would be approximately 691 acres. The Project would require a General Plan Amendment, a Rezone, and a Major Use Permit. Eventual decommissioning would occur at the end of the Project's useful life. The site previously included agricultural operations.

Project Location: The 1,345-acre project site is located in the unincorporated Mountain Empire Subregion of the County. The site is adjacent to the community of Jacumba Hot Springs and the Jacumba Airport, and to the south of Interstate 8 (I-8). The U.S./Mexico international border is located along the southern boundary of the Project site. Primary access would be provided from I-8 with local access from Carrizo Gorge Road and Old Highway 80.

COMMENTS AND RECOMMENDATIONS

The CDFW offers the following comments and recommendations to assist the County in adequately identifying and/or mitigating the Project's significant, or potentially significant, direct and indirect impacts on fish and wildlife (biological) resources.

Comment #1: Impacts to Vegetation Communities

Table 2.3-4 indicates that desert saltbush scrub will have a mitigation deficit of 96.09 acres at a 2:1 ratio. The DEIR states that this deficit is mitigated through the preservation of desert sink scrub (12.43 acres), mesquite bosque (24.46 acres), and Sonoran mixed woody and succulent scrub (59.20 acres).

Issue: The DEIR proposes to mitigate 96.09 acres of desert saltbush scrub out-of-kind. This habitat type is associated with a number of special status species such as glossy snake (*Arizona elegans occidentalis*), burrowing owl (*Athene cunicularia*), and loggerhead shrike (*Lanius ludovicianus*). And a potential burrowing owl burrow was detected onsite within this habitat type.

Specific Impact: With the proposed mitigation measure, the Project would result in a permanent loss of 96.09 acres of desert saltbush scrub. This plant community could provide habitat for special status plant and wildlife species.

Why impacts would occur: Desert saltbush scrub could provide habitat for special status plants and wildlife species. Impacts to special status plants and wildlife species may occur through habitat loss or modification, resulting in reduced reproductive capacity, population declines, or local extirpation of a sensitive or special status plant or wildlife species.

Evidence impacts would be significant: Inadequate avoidance, minimization, and mitigation measures for impacts to sensitive vegetation communities will result in the Project continuing to

Susan Harris
County of San Diego, Planning and Development Services
December 7, 2020
Page 3 of 35

have a substantial adverse direct, indirect, and cumulative effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by CDFW or United States Fish and Wildlife Service (USFWS).

Mitigation Measure #1: CDFW recommends that the project proponent restore or create habitat on or off site at no less than 2:1 for permanent impacts to desert saltbush scrub. For mitigation through participation in a mitigation bank, CDFW recommends no less than 3:1 for permanent impacts for the desert saltbush scrub vegetation community.

CDFW's recommended ratio is higher to account for loss of seed bank and risk of failure. High attrition and low survivorship of native seedlings may occur. Moreover, the ratio is higher to account for the temporal loss of habitat. This may be multiple years, from the moment of impact to until the project proponent is able to restore/create self-sustaining habitat that is similar in species abundance, composition, density, and coverage to the habitat impacted. CDFW recommends habitat restoration or creation in areas suitable to support plant species found in desert saltbush scrub. Mitigation should not occur where physical and/or biological factors (e.g., soils, slope) are not suitable to support desert saltbush scrub.

Comment #2: Impacts to Special Status Plants

Impact BI-SP-2 of the DEIR states that there will be direct impacts to pygmy lotus (*Acmispon haydonii*) and sticky geraea (*Geraea viscida*). Pygmy lotus is a California Rare Plant Rank (CRPR) List 1B.3 (California Native Plant Society 2019, CNPS) and County List A species (County of San Diego 2010a). Sticky geraea is a CRPR 2B.2 (CNPS 2019) and a County List B species (County of San Diego 2010a). Page 104 of the DEIR says that County List A species (pygmy lotus) will be mitigated at a 3:1 ratio and County List B species (sticky geraea) will be mitigated at a 1:1 ratio. The DEIR proposes mitigation through "a combination of salvaging plants located in proposed impact areas and replanting in suitable mitigation lands and establishment of additional plants" (page 104). Specific provisions are to be delineated in the Resources Management Plan (RMP) per Mitigation Measure M-BI-4.

Issue: CDFW does not consider transplanting or salvaging rare plants within a development as appropriate mitigation for rare plants. Translocation and transplantation are the process of moving an individual plant from the Project site and permanently moving it to a new location. The DEIR does not provide sufficient detail for the mitigation for these plants. In addition, "suitable mitigation lands" should be specified within the EIR and future RMP.

Recommendation #1: CDFW generally does not support the use of translocation or transplantation as the primary mitigation strategy for unavoidable impacts to species. Studies have shown that these efforts are experimental and the outcome unreliable (CNPS 1998). CDFW has found that permanent preservation and management of habitat capable of supporting these species is often a more effective long-term strategy for conserving sensitive plants. Furthermore, we recommend that the EIR include specific provisions for mitigation for these plants in the RMP, to include details on the use of a qualified restoration specialist, the dates restoration is to take place, and the exact locations for restoration. We recommend further research to determine the best conservation and restoration strategy for these plant species, as many plants have higher survivorship when seeded rather than transplanted.

Susan Harris
County of San Diego, Planning and Development Services
December 7, 2020
Page 4 of 35

Comment #3: Impacts to Species of Special Concern (SSC)

The following special-status species were observed at the Project site: San Diegan tiger whiptail (*Aspidoscelis tigris stejnegeri*; County Group 2, SSC), tricolored blackbird (*Agelaius tricolor*; Group 1, ST [state threatened], BCC, SSC), golden eagle (*Aquila chrysaetos*; Group 1, BCC, FP, WL), burrowing owl (*Athene cunicularia*; County Group 1, BCC, SSC), Vaux's swift (*Chaetura vauxi*; SSC), northern harrier (*Circus hudsonius*; County Group 1, SSC), loggerhead shrike (*Lanius ludovicianus*; County Group 1, BCC, SSC), yellow-headed blackbird (*Xanthocephalus xanthocephalus*; SSC), San Diego black-tailed jackrabbit (*Lepus californicus*; Group 2, SSC), San Diego desert woodrat (*Neotoma lepida intermedia*; County Group 2, SSC), American badger (*Taxidea taxus*; potential burrow) (Group 2, SSC), and Quino checkerspot butterfly (*Euphydryas editha quino*; County Group 1; FE [federally endangered]).

The following are special-status species with high potential to occur in the BSA: California glossy snake (*Arizona elegans occidentalis*; SSC), San Diego banded gecko (*Coleonyx variegatus abboti*; County Group 1, SSC), red diamond rattlesnake (*Crotalus ruber*; County Group 2, SSC), Blainville's horned lizard (*Phrynosoma blainvillii*; County Group 2, SSC), pallid bat (*Antrozous pallidus*; County Group 2, SSC), northwestern San Diego pocket mouse (*Chaetodipus fallax*; County Group 2, SSC), pallid San Diego pocket mouse (*Chaetodipus fallax pallidus*; County Group 2, SSC), and Jacumba pocket mouse (*Perognathus longimembris internationalis*; County Group 2, SSC).

Issue: Impacts to SSC are discussed in section 2.3.3.2, labeled Impact BI-W-1 and BI-W-2. The DEIR proposes mitigation measures M-BI-1 (biological monitoring), M-BI-2 (temporary construction fencing, M-BI-3 (habitat preservation), M-BI-4 (RMP) and M-BI-5 (nesting bird survey) to avoid or minimize impacts to special status species. CDFW appreciates the intention behind these mitigation measures, but is concerned that the measures do not provide enough specificity to avoid or minimize impacts to special status species, specifically Species of Special Concern.

Specific impact: Direct impacts to SSC could result from Project construction and activities (e.g., equipment staging, mobilization, and grading); ground disturbance; vegetation clearing; and trampling or crushing from construction equipment, vehicles, and foot traffic and increased temperatures around the solar arrays. Indirect impacts could result from temporary or permanent loss of suitable habitat.

Why impacts would occur: Without appropriate species-specific avoidance measures, biological construction monitoring may be ineffective for detecting SSC. This may result in trampling or crushing of SSC. Demolition and paving after false negative conclusions may trap wildlife hiding under refugia and burrows. Large solar panel arrays are known to emit levels of heat that can harm birds (Walston et al. 2016).

Evidence impacts would be significant: CEQA provides protection not only for CESA- and ESA-listed species, but for any species including but not limited to SSC. CDFW considers impacts to SSC a significant direct and cumulative adverse effect without implementing appropriate avoidance and/or mitigation measures. Take of SSC could require a mandatory finding of significance by the Lead Agency (CEQA Guidelines, § 15065).

Recommended Potentially Feasible Mitigation Measure(s): CDFW recommends the County of San Diego include SSC-specific mitigation measures in the final environmental document.

Susan Harris
County of San Diego, Planning and Development Services
December 7, 2020
Page 5 of 35

Mitigation Measure #2: Scientific Collecting Permit – CDFW has the authority to issue permits for the take or possession of wildlife, including mammals; birds, nests, and eggs; reptiles, amphibians, fish, plants; and invertebrates (Fish & G. Code, §§ 1002, 1002.5, 1003). Effective October 1, 2018, a Scientific Collecting Permit is required to monitor project impacts on wildlife resources, as required by environmental documents, permits, or other legal authorizations; and, to capture, temporarily possess, and relocate wildlife to avoid harm or mortality in connection with otherwise lawful activities (Cal. Code Regs., tit. 14, § 650). Please visit CDFW's Scientific Collection Permits webpage for information (CDFW 2020c).

Pursuant to the California Code of Regulations, title 14, section 650, the County of San Diego/qualified biologist must obtain appropriate handling permits to capture, temporarily possess, and relocate wildlife to avoid harm or mortality in connection with Project construction and activities.

Mitigation Measure #3: Species Surveys – The County should retain a qualified biologist with experience surveying for southern California special status wildlife species. Prior to commencing any project construction and activities, including equipment and material staging, the qualified biologist should conduct surveys for where suitable habitat is present and directly impacted by project construction and activities, and construction equipment and vehicle access and parking. Surveys should place an emphasis towards identifying any Species of Special Concern (SSC) including (but not limited to) California glossy snake; loggerhead shrike; burrowing owl; American badger; and San Diego desert woodrat. Focused surveys should consist of a minimum of three daytime surveys and one nighttime survey no more than 7 days from the start of any project construction and activities.

If SSC are detected, the qualified biologist should use visible flagging to mark the location where SSC was detected. The qualified biologist should take a photo of each location, map each location, and provide the specific species detected at that location. Flagging should be maintained for the duration of the project. The qualified biologist should provide a summary report of herpetofauna surveys to the County before any demolition, paving, soil compaction, and vegetation clearing work occurs.

Mitigation Measure #4: Relocation Plan – The qualified biologist should prepare a species-specific list (or plan) of proper handling and relocation protocols and a map of suitable and safe relocation areas. The list (or plan) of protocols should be implemented during project construction and activities/biological construction monitoring. A qualified biologist may consult with CDFW to prepare species-specific protocols for proper handling and relocation procedures.

Mitigation Measure #5: Worker Training and Field Protocols – During project construction and activities, the qualified biologist should have prepared a map showing locations where SSC were detected and share this information to workers as part of the Worker Environmental Awareness Program (WEAP). The qualified biologist should communicate to workers that upon encounter with a SSC, work must stop, a qualified biologist must be notified, and work may only resume once a qualified biologist has determined that it is safe to do so. Any contractor or employee that inadvertently kills or injures a special-status animal, or finds one either dead, injured, or entrapped, should immediately report the incident to the qualified biologist and/or onsite representative identified in the WEAP.

Monitoring by a qualified biologist will occur continuously during all ground disturbance work (i.e., demolition, paving, soil compaction, and grading), vegetation removal, and installation of

Susan Harris
County of San Diego, Planning and Development Services
December 7, 2020
Page 6 of 35

the portion of the gas pipeline occurring in densely vegetated areas. Surveys for SSC should be conducted prior to the initiation of each day of vegetation removal activities in suitable habitat. Surveys for SSC should be conducted in the areas flagged in earlier surveys before construction and activities may occur in or adjacent to those areas. Work may only occur in these areas after a qualified biologist has determined it is safe to do so. Even so, workers should be advised to work with caution near flagged areas. Once all ground disturbance work, vegetation removal, and pipeline installation are complete, monitoring will occur periodically for the duration of the project. If SSC is encountered, qualified biologist should safely relocate the animal per relocation and handling protocols.

Mitigation Measure #6: Injured or Dead Wildlife – If any SSC are harmed during relocation or a dead or injured animal is found, work in the immediate area should stop immediately, the qualified biologist should be notified, and dead or injured wildlife documented immediately. The qualified biologist should contact the USFWS, CDFW, and the County by telephone by the end of the day, or at the beginning of the next working day if the agency office is closed. In addition, a formal report should be sent to the County, CDFW, and USFWS (as appropriate) within three calendar days of the incident or finding. The report should include the date, time of the finding or incident (if known), and location of the carcass or injured animal and circumstances of its death or injury (if known). Injured animals should be taken immediately to the nearest appropriate veterinary or wildlife rehabilitation facility. The qualified biologist should, immediately upon finding the remains or injured animal, coordinate with the onsite construction foreman to discuss the events that caused the mortality or injury, if known, and implement measures to prevent future incidents. Details of these measures should be included with the report. Work in the immediate area may only resume once the proper notifications have been made and additional mitigation measures have been identified to prevent additional injury or death. Species remains should be collected and frozen as soon as possible, and CDFW and USFWS, as appropriate, should be contacted regarding ultimate disposal of the remains.

Comment #4: Impacts to Nesting Birds

Issue: M-BI-5(a) uses buffers to minimize impacts rather than fully avoiding impacts to nesting birds.

Specific impact: Increased nesting mortality due to nest abandonment or decreased feeding frequency as a result of Project construction and activities.

Why impacts would occur: Construction during the breeding season for nesting birds could result in the loss of fertile eggs or nestlings or otherwise lead to nest abandonment. Impacts could result from noise disturbances, increased human activity, dust, vegetation clearing, ground disturbing activities (e.g., staging, access, excavation, grading), and vibrations caused by heavy equipment.

Evidence impacts would be significant: Nests of all birds and raptors are protected under State laws and regulations, including Fish and Game Code, sections 3503 and 3503.5. Take or possession of migratory nongame birds designated in the Federal Migratory Bird Treaty Act of 1918 (Code of Federal Regulations, Title 50, § 10.13) is prohibited under Fish and Game Code section 3513. The loss of occupied habitat or reductions in the number of sensitive and special status bird species, either directly or indirectly through nest abandonment or reproductive suppression, would constitute a significant impact absent appropriate mitigation.

Susan Harris
County of San Diego, Planning and Development Services
December 7, 2020
Page 7 of 35

Recommended Potentially Feasible Mitigation Measure(s)

Mitigation Measure #7: CDFW recommends modifying Mitigation Measure M-BI5(a) to fully avoid impacts to nesting birds by conditioning the environmental document to provide the following language: “Project construction, equipment staging, mobilization, grading, ground disturbance activities, and vegetation removal shall be completed outside the avian breeding season. The County of San Diego will not perform any Project construction or activities or remove or otherwise disturb vegetation on the project site from February 15 to August 31, and as early as January 1, to avoid impacts to breeding/nesting birds and raptors.”

Comment #5: Impacts to Tricolored Blackbird

Issue: Page 28 of the Biological Technical Report (Dudek 2019) states that tricolored blackbird was observed during focused Quino checkerspot butterfly surveys perched in trees adjacent to the U.S./Mexico border and were observed nesting in the pond west of Jacumba Street in 2019 (Amoaku 2019), approximately 0.5 mile west of the BSA. Based on 2019 observations, they utilize the southwestern portion of the site for foraging. Per the map provided in Figure 2.3.7 of the DEIR, tricolored blackbird are observed within the direct project footprint. It is unclear what indirect impacts the Project may have on this species.

Specific impact: The Proposed Project would impact 593.5 acres of potential tricolored blackbird foraging habitat within the Project site. Additionally, no provisions are made to avoid direct impacts to any tricolored blackbird onsite during demolition, grading and other construction activities. The Project provides mitigation measure M-BI-3 (Habitat Preservation) and M-BI-4 (RMP) to mitigate for these impacts; however, further clarification should be included in the DEIR to assess indirect impacts to the species due to loss of foraging habitat and the effect of increased ambient heat around the solar arrays.

Why impacts would occur: The Proposed Project will remove 593.5 acres of suitable foraging habitat for tricolored blackbird. The installation and presence of a large solar arrays are known to result in increased bird mortalities due to the increased heat surrounding the solar panels.

Evidence impacts would be significant: Inadequate avoidance and mitigation measures will result in the Project continuing to have a substantial adverse direct and cumulative effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by CDFW or USFWS.

Recommended Potentially Feasible Mitigation Measure(s)

Mitigation Measure #8: Permanent impacts to occupied and adjacent foraging habitat should be offset by setting aside replacement habitat to be protected in perpetuity under a conservation easement dedicated to a local land conservancy or other appropriate entity, that should include an appropriate non-wasting endowment to provide for the long-term management of mitigation lands. CDFW recommends that the County require a tricolored blackbird mitigation plan to be submitted to CDFW for review and comment prior to Project implementation.

Recommendation #2: CDFW recommends monitoring for the tricolored blackbird within the easement area to ensure its intended habitat functionality. We also recommend that the final

Susan Harris
County of San Diego, Planning and Development Services
December 7, 2020
Page 8 of 35

document includes an impact analysis to address the effect of heat from solar panels on tricolored blackbird.

Comment #6: Impacts to Burrowing Owl

Issue: The DEIR states that burrowing owl was detected onsite, with one active burrow onsite and a second potential burrow onsite.

Specific impact: Burrowing owl presence and potential burrows indicate that Project activities may result in direct and/or indirect burrowing owl mortality or injury; the disruption of natural burrowing owl breeding behavior; and loss of breeding, wintering and foraging habitat for the species. Project impacts would contribute to statewide population declines for burrowing owl.

Why impact would occur: Burrowing owls are known to occur onsite with at least one active burrow. Nest and roost burrows of the burrowing owl are most commonly dug by ground squirrels (*Otospermophilus beecheyi*), but they have also been known to use a variety of other species dens or holes, including coyote (*Canis latrans*) (Gervais, J.A., Rosenberg, D.K., and Comrack, L.A., 2008). These associated species having either been observed or are expected to occur on site. Impacts to burrowing owl could result from vegetation clearing and other ground disturbing activities. Project disturbance activities may result in crushing or filling of active owl burrows, causing the death or injury of adults, eggs, and young. In addition, the Project may remove burrowing owl foraging habitat by eliminating native vegetation that supports essential rodent, insect, and reptile that are prey for burrowing owl. Rodent control activities could result in direct and secondary poisoning of burrowing owl ingesting treated rodents.

Evidence impact would be significant: Take of individual burrowing owls and their nests is defined by Fish and Game Code section 86 and prohibited by sections 3503, 3503.5, and 3513. Take is defined in Fish and Game Code section 86 as “hunt, pursue, catch, capture or kill, or attempt to hunt, pursue, catch, capture or kill.” Without appropriate take avoidance surveys prior to Project operations including, but not limited to, ground and vegetation disturbing activities and rodent control activities, adverse impacts to burrowing owl may occur because species presence/absence has not been verified. In addition, burrowing owl qualifies for enhanced consideration afforded to species under CEQA, that can be shown to meet the criteria for listing as endangered, rare or threatened (CEQA Guidelines, § 15380(d)).

Inadequate avoidance and mitigation measures will result in the Project continuing to have a substantial adverse direct and cumulative effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by CDFW or United States Fish and Wildlife Service (USFWS).

Recommended Potentially Feasible Mitigation Measure(s)

Mitigation Measure #9: To reduce impacts to burrowing owl, CDFW recommends that the Project adhere to CDFW’s March 7, 2012, Staff Report on Burrowing Owl Mitigation. All survey efforts should be conducted prior to any project activities that could result in habitat disturbance to soil, vegetation or other sheltering habitat for burrowing owl. In California, the burrowing owl breeding season extends from 1 February to 31 August with some variances by geographic location and climatic conditions. Survey protocol for breeding season owl surveys states to conduct four survey visits: 1) at least one site visit between 15 February and 15 April, and 2) a

Susan Harris
County of San Diego, Planning and Development Services
December 7, 2020
Page 9 of 35

minimum of three survey visits, at least three weeks apart, between 15 April and 15 July, with at least one visit after 15 June.

Mitigation Measure #10: Permanent impacts to occupied owl burrows and adjacent foraging habitat should be offset by setting aside replacement habitat to be protected in perpetuity under a conservation easement dedicated to a local land conservancy or other appropriate entity, that should include an appropriate non-wasting endowment to provide for the long-term management of mitigation lands. CDFW recommends that the County require a burrowing owl mitigation plan be submitted to CDFW for review and comment prior to Project implementation.

Mitigation Measure #11: Project use of rodenticides that could result in direct or secondary poisoning to burrowing owl should be avoided.

Comment #7: Impacts to Golden Eagle

Issue: The Biological Resources section of the DEIR states that, "One juvenile golden eagle was observed flying over the project site on March 24, 2019 and a golden eagle was observed kettling with a group of turkey vultures, ravens, and red-tailed hawks on April 14, 2019. There is a golden eagle nest recorded on Round Mountain (northwest of the BSA)." The DEIR also states that it does not appear that golden eagles utilize the BSA regularly; however, recent data from USGS indicates that this area has frequent documented presence of golden eagle. Additionally, the DEIR states that impacts to this species is unlikely due to their wide ranges; however, that statement is unsubstantiated and should therefore not be included in the impact analysis.

Specific Impact: Section 1.2.1 states the Project would include "Five 138 kV transmission poles ranging in height from 70 to 115 feet, with approximately 1,860 feet overhead transmission lines (tie-in) to loop the switchyard into the existing SDG&E Boulevard – East County transmission line". Electrocutation from transmission poles remains a major cause of mortality for golden eagle. The construction of the solar array will also remove foraging habitat for golden eagle. The DEIR does not analyze any indirect, direct or cumulative impacts that the Project may have on the resident species.

Evidence the impact would be significant: The golden eagle is a California Fully Protected Species, a species protected by the federal Bald and Golden Eagle Protection Act, and preliminarily proposed to be a covered species in the forthcoming East County MSCP. Golden eagle is known to nest in the East County MSCP Plan Area and to practice nest fidelity. In addition, County Biological Guidelines (Page 20, County of San Diego 2010) state, "[a]ny alteration of habitat within 4,000 feet of an active golden eagle nest could only be considered less than significant if a biologically-based determination can be made that the project would not have a substantially adverse effect to the long-term survival of the identified pair of golden eagles."

Furthermore, California Fish and Game Code FGC § 3511 states that, 'Except as provided in this section, Section 2081.7, or Section 2835, a fully protected bird may not be taken or possessed at any time. No provision of this code or any other law shall be construed to authorize the issuance of a permit or license to take a fully protected bird, and no permit or license previously issued shall have any force or effect for that purpose.'

Susan Harris
County of San Diego, Planning and Development Services
December 7, 2020
Page 10 of 35

Recommended Potentially Feasible Mitigation Measure(s)

Mitigation Measure #12: Additional impact analysis is requested to justify the DEIR conclusion that project impacts to golden eagle would not be significant. Due to shortcomings in the impact analysis, the DEIR should demonstrate how the required golden eagle nesting buffer of 4,000 feet will be met and how the Project will safeguard against golden eagle electrocution. The DEIR should include details on the design, construction, installation and maintenance of transmission poles and solar panels and demonstrate how these will minimize impacts to golden eagle.

Mitigation Measure #13: Project use of rodenticides that could result in direct or secondary poisoning to golden eagle and other raptor species should be avoided.

Comment #8: Impacts to Bats

Issue: The Pallid bat (*Antrozous pallidus*) is an SSC and County Group 2 species, and there is a known CNDDDB occurrence overlapping the eastern boundary of the Project site. The DEIR also states there are records of pallid bats roosting in a bridge in Jacumba in 2014. M-BI-6 of the DEIR makes provisions for bat surveys and roost avoidance and exclusion. The CDFW recommends (1) surveys to determine presence or absence of a maternity or night roost, and (2) specific information on proposed potential bat houses and location if species are impacted by the Project.

Specific impact: Pallid bat and western small-footed myotis (*Myotis ciliolabrum*) have a high potential to roost in the abandoned buildings onsite, which would be demolished as part of the proposed Project. If there were a maternity roost in a building, impacts on that roost site would be significant. Indirect impacts to bats and roosts could result from increased noise disturbances, human activity, dust, vegetation clearing, ground disturbing activities (e.g., staging, access, mobilization, and grading), and vibrations caused by heavy equipment. Demolition, grading, and excavating activities may impact bats potentially using man-made structures or surrounding trees as roost sites.

Why impacts would occur: Demolition of buildings occupied by bats would result in direct take of the species. Modifications to roost sites can have significant impacts on the bats' usability of the roost and can impact the bats' fitness and survivability (Johnston et al. 2004). Extra noise and vibration can lead to the disturbance of roosting bats which may have a negative impact on the animals. Human disturbance can also lead to a change in humidity, temperatures, or the approach to a roost that could force the animals to change their mode of egress and/or ingress to a roost. Although temporary, such disturbance can lead to the abandonment of a maternity roost (Johnston et al. 2004). Although free standing bat houses may be successful as mitigation for roost sites, sometimes the bats fail to use the free-standing bat boxes (Johnston et al. 2004).

Evidence impacts would be significant: Bats are considered non-game mammals and are afforded protection by state law from take and/or harassment (Fish & G. Code, § 4150; Cal. Code of Regs, § 251.1). Pallid bat and western mastiff bat, including additional bat species, considered California Species of Special Concern (SSC) and meet the CEQA definition of rare, threatened, or endangered species (CEQA Guidelines, § 15065). Take of SSC could require a mandatory finding of significance by the Lead Agency (CEQA Guidelines, § 15065).

Susan Harris
County of San Diego, Planning and Development Services
December 7, 2020
Page 11 of 35

Recommended Potentially Feasible Mitigation Measure(s)

Mitigation Measure #14: A biologist with expertise and experience with bats shall be retained as a Designated Bat Biologist. The Designated Bat Biologist shall have at least three years of experience in conducting bat habitat assessments, day roosting surveys, and acoustic monitoring, and have adequate experience identifying local bat species (visual and acoustic identification), type of habitat, and differences in roosting behavior and types (i.e., day, night, maternity).

CDFW recommends the Designated Bat Biologist conduct bat surveys within the Biological Study Area (plus a 100-foot buffer as access allows) to identify potential habitat that could provide daytime and/or nighttime roost sites, and any maternity roosts. CDFW recommends using acoustic recognition technology to maximize detection of bats. Night roosts are typically utilized from the approach of sunset until sunrise. Maternity colonies, composed of adult females and their young, typically occur from spring through fall.

A discussion of survey results, including negative findings, should be provided in the final environmental document. Depending on survey results (e.g., Species of Special Concern observed, roosts are detected, etc.), the DEIR should discuss potentially significant effects of the proposed Project on the bats and include species specific mitigation measures to reduce impacts to below a level of significance (CEQA Guidelines, § 15125).

Mitigation Measure #15: CDFW recommends modifying M-BI-6 as follows (additions in bold and strikethrough for removal):

M-BI-6 Bat Surveys and Roost Avoidance or Exclusion. To determine whether there is an active maternity roost within the buildings and other structures to be demolished, a bat biologist shall conduct surveys prior to demolition of the buildings or any other areas that provide suitable roosting habitat for bats. If a potential maternity roost is present, the following measures shall be implemented to reduce the potential impact on special-status bat species to a less than significant level:

- a. Maternity Roosting Season Avoidance.** All demolition activities, or bat roost exclusion, shall occur outside the general bat maternity roosting season of March through August to reduce any potentially significant impact to maternity roosting bats. Items b and c below will be required to ensure no impacts occur to roosting bats during the exclusion process.
- b. Replacement Roost Installation.** If there is a potential or known maternity roost within a structure to be demolished, a replacement roost installation shall occur outside of the maternity roosting season within the biological open space easement. At least one month prior to the exclusion of bats from the roost(s), the project applicant will procure and install two bat boxes from a reputable vendor, such as Bat Conservation and Management, to allow bats sufficient time to acclimate to a new potential roost location. The bat boxes shall be installed in an area that is close to suitable foraging habitat as determined by a biologist who specializes in bats in consultation with County staff and CDFW. Additionally, the bat boxes will be oriented to the south or southwest, and the area chosen for the bat boxes must receive sufficient sunlight (at least 6 hours daily) to allow the bat boxes to reach an optimum internal temperature (approximately 90°F) to mimic the

Susan Harris
County of San Diego, Planning and Development Services
December 7, 2020
Page 12 of 35

existing bat roost. The bat boxes will be suitable to house crevice-roosting bat species, and large enough to contain a minimum of 50 bats (e.g., Four Chamber Premium Bat House or Bat Bunker Plus). The bat boxes shall be installed on a 20-foot-tall steel pole. Should the bat boxes be required, maintenance of the boxes will be included in the RMP to ensure long-term use/functionality. Monitoring should be required each month during construction and quarterly thereafter until it can be established that the bat box is being used by bats and the species of bats using the box is determined. If the boxes are unsuccessful, Adaptive Management Measures will be in place.

- c. **Survey Report.** Following completion of the survey the bat biologist will complete a survey report which records the findings.

Comment #9: Impacts to Quino Checkerspot Butterfly

Issue: Quino checkerspot butterfly (*Euphydryas editha quino*) is a federally endangered and County Group 1 species. This species is found only in western Riverside County, southern San Diego County, and northern Baja California, Mexico (USFWS 2003). Page 24 of the DEIR states that Quino checkerspot butterfly was observed during the 2019 rare plant survey in the southwestern portion of the Project site on a hilltop. The DEIR makes provisions to avoid the occupied hilltop; however, further discussion should be included in the final document to address indirect impacts to the species.

Specific impact: Direct impacts to Quino checkerspot butterfly could result from Project construction and activities (e.g., equipment staging, mobilization, and grading); ground disturbance; vegetation clearing; and trampling or crushing from construction equipment, vehicles, and foot traffic and increased temperatures around the solar arrays. Indirect impacts could result from fugitive dust from construction activities on foraging habitat and other edge effects associated with landscaping and fencing.

Why impacts would occur: Page 32 of the DEIR states that the Project is within 0.25 mile of federally designated Quino checkerspot butterfly critical habitat, and the species has been detected onsite and adjacent to the site. The DEIR does not clearly demonstrate how the Project will avoid and minimize both direct and indirect impacts to this federally listed species.

Evidence impacts would be significant: CEQA provides protection for CESA- and ESA-listed species. Quino checkerspot butterfly is federally endangered and CDFW considers impacts to federally threatened species a significant direct and cumulative adverse effect without implementing appropriate avoidance and/or mitigation measures.

Recommendation #3: CDFW appreciates the completion of focused protocol Quino surveys and the avoidance of the occupied hilltop. However, it is unclear (1) how far the occupied area is from the direct Project footprint, and (2) how these buffers will be maintained during construction and post construction. Furthermore, the impact analyses do not address indirect impacts to the Quino checkerspot butterfly. CDFW requests further provisions be made in the final document to address buffer requirements for this species during construction and operation of the facility, how this species will be monitored throughout the Project implementation and address mitigation for indirect impacts to this species.

Susan Harris
County of San Diego, Planning and Development Services
December 7, 2020
Page 13 of 35

Comment #10: Impacts to Aquatic and Riparian Resources

Issue: The DEIR acknowledges that direct or indirect impacts to aquatic and riparian resources may occur, warranting a Lake and Streambed Alteration (LSA) Notification. Page 61 states that “removal of vegetation; grading; obstruction or diversion of water flow; adverse change in velocity, siltation, volume of flow, or runoff rate; placement of fill; placement of structures; construction of a road crossing; placement of culverts or other underground piping; any disturbance of the substratum; and/or any activity that may cause an adverse change in native species composition, diversity, and abundance” within CDFW streams.

Specific impact: Hydrologic processes and waterbodies may be impacted by the Project. Vegetation removal and ground disturbing activities (e.g., excavating, demolition, grading, and infill) may increase the amount of sediment, debris, and pollutants in the landscape, which may be transported downstream and impair waterbodies. This may impact special status species directly or indirectly through habitat modifications or habitat loss.

Why impacts would occur: The Project would result in removal of vegetation associated with streambeds and ground disturbing activities that may affect hydrological processes.

Evidence impacts would be significant: The Project may impact aquatic and riparian resources, which absent specific mitigation, could result in substantial erosion or siltation onsite or downstream of the Project. As a Responsible Agency under CEQA, CDFW has authority over activities in streams and/or lakes that will divert or obstruct the natural flow; or change the bed, channel, or bank (including vegetation associated with the stream or lake) of a river or stream; or use material from a streambed. For any such activities, the project applicant (or “entity”) must provide written notification to CDFW pursuant to section 1600 et seq. of the Fish and Game Code. As a Responsible Agency, CDFW may consider the CEQA document prepared by the local jurisdiction (Lead Agency) for the Program. To minimize additional requirements by CDFW pursuant to section 1600 et seq. and/or under CEQA, the DEIR should fully identify the potential impacts to the stream or riparian resources and provide adequate avoidance, mitigation, monitoring and reporting commitments for issuance of the LSA Agreement.

Recommended Potentially Feasible Mitigation Measure(s)

Mitigation Measure #16: CDFW has concluded that the Project may result in the alteration of streams. For any such activities, the Project applicant (or “entity”) must provide notification to CDFW pursuant to Fish and Game Code, section 1600 et seq. Based on this notification and other information, CDFW determines whether a Lake and Streambed Alteration (LSA) Agreement with the applicant is required prior to conducting the proposed activities. Please visit CDFW’s Lake and Streambed Alteration Program webpage to for information about LSA notification and online submittal through the Environmental Permit Information Management System (EPIMS) Permitting Portal (CDFW 2020b).

CDFW’s issuance of an LSA for a Project that is subject to CEQA will require CEQA compliance actions by CDFW as a Responsible Agency. As a Responsible Agency, CDFW may consider the CEQA document from the County for the Project. To minimize additional requirements by CDFW pursuant to Fish and Game Code, section 1600 et seq. and/or under CEQA, the CEQA document should fully identify the potential impacts to the stream or riparian resources and provide adequate avoidance, mitigation, monitoring, and reporting commitments for issuance of the LSA.

Susan Harris
County of San Diego, Planning and Development Services
December 7, 2020
Page 14 of 35

Any LSA permit issued for the Project by CDFW may include additional measures protective of streambeds on and downstream of the Project site. The LSA may include further erosion and pollution control measures. To compensate for any onsite and offsite impacts to riparian resources, additional mitigation conditioned in any LSA may include the following: avoidance of resources, onsite or offsite creation, enhancement or restoration, and/or protection, and management of mitigation lands in perpetuity.

Comment #11: Wildlife Movement and Edge Effects

Issue: CDFW is concerned that the DEIR does not recognize that this area may significantly contribute to regional wildlife movement and does not appropriately address fragmentation and edge effects of the Project. Page 31 of the DEIR states,

“The Project site is included within a Core Wildlife Area as defined by the County based on its size and the surrounding undeveloped land (County of San Diego 1997). The Project site is currently undeveloped, except for dairy and ranch structures north of Old Highway 80, but the International border fence limits the ability of the Project site to function as a linear north–south wildlife corridor for large mammals. The Proposed Project vicinity is generally surrounded by undeveloped landscapes to the north (of I-8), east, and northwest.”

Specific Impact: The Project area will remove 643 acres of undeveloped land that currently serves as a wildlife movement area. The Project would consist of 300,000 photovoltaic modules that would effectively remove any wildlife movement functionality of the current habitat. The Project also includes security fencing and motion-sensor lighting that would impede wildlife movement through the area.

Why impact would occur: If the County does not recognize this area as an important corridor for the movement of wildlife it is possible that future development in rural, desert areas may lead to further loss of these biological resources. Desert areas are commonly desired areas for alternative energy facilities, but the cumulative effect of these types of facilities being constructed inordinately in flat, desert areas may result in significant overall loss of the biological resources therein (Moore-O’Leary et al. 2017). This area is already vulnerable to local extirpations of wildlife species, such as the American badger, that require large areas of habitat to sustain viable populations.

Evidence impact would be significant: The Project area contributes to regional wildlife movement east-west within the area, and The Project site supports the passage of large and small mammals as well as migrating birds and sensitive species foraging in the area. In addition, the habitat in the Project site supports the natural areas and the open space around the Project vicinity.

Recommended Potentially Feasible Mitigation Measure(s)

Mitigation Measure #17 – RMP: The DEIR proposes mitigation measure M-BI-3 (Habitat Preservation) to mitigate for impacts to wildlife movement. Page 43 of the DEIR states,

“The biological open space will preserve in perpetuity 435 acres of habitat, located immediately adjacent to existing preserve lands located west of the project site that play a vital role in reducing impacts to biological resources. The on-site mitigation area has

Susan Harris
County of San Diego, Planning and Development Services
December 7, 2020
Page 15 of 35

been designed to maximize its biological function as part of a wildlife corridor and to sustain habitat connectivity,”

However, CDFW is concerned that this measure does not adequately address the impacts to wildlife movement and edge effects caused by the Project. CDFW recommends that provisions be made in the future RMP to monitor habitat connectivity within the biological easement area, including the use of camera traps around the Project facility and the biological easement area to assess wildlife movement.

Mitigation Measure #18: Lighting – CDFW appreciates that the Project makes provisions to reduce light pollution, but we further recommend removal of motion sensor lighting from the DEIR, as this type of lighting can deter wildlife and impede movement throughout the area. Night lighting can disrupt the circadian rhythms of many wildlife species. Therefore, if night lighting is required at entry points, we recommend low level lighting. All non-essential lighting should be eliminated. The Project should avoid or limit the use of artificial light during the hours of dawn and dusk, as these windows of time are when many wildlife species are most active.

Mitigation Measure #19: Fencing – The Project site is located in a low-density area that could support wildlife movement across the broader landscape, sustaining both transitory and permanent wildlife populations. Accordingly, CDFW recommends that the County of San Diego consider permeable, wildlife friendly fencing. Wildlife impermeable fencing prevents or creates a barrier for the passage of wildlife from one side to the other. Chain link fences – a type of impermeable fencing - can create hazards and barriers for wildlife movement, seasonal migrations, and access to food and water. CDFW recommends reviewing A Landowner’s Guide to Wildlife Friendly Fences for additional information (Montana Fish, Wildlife and Parks 2012).

Comment #12: Mountain lion (*Puma concolor*)

Issue: The DEIR did not identify the recent change in protection status of the mountain lion population and the potential for human-wildlife conflict during Project activities.

The mountain lion is a specially protected mammal in the State (Fish and Game Code, § 4800). In addition, on April 21, 2020, the California Fish and Game Commission (Commission) accepted a petition to list an evolutionarily significant unit (ESU) of mountain lion in southern and central coastal California as threatened under CESA. As a CESA-candidate, the species is granted full protection of a threatened species under CESA.

Therefore, any new development project should analyze the potential for mountain lion. The discussion on the Habitat Connectivity and Wildlife Corridors mentions mountain lions. However, it unclear if surveys for this species were conducted.

Specific Impact: Due to mountain lion’s updated status, it is important for the final environmental document to analyze the impacts associated with human-wildlife conflicts that come with increases in human development and presence in potential wildlife corridor areas.

Why impact would occur: Mountain lions potentially present in the Project vicinity may be impacted by Project activities such as increased human presence, increase in traffic causing vehicle strikes, as well as increased exposure to light and noise. Mountain lions rely on deer as a food source, so any impacts to deer should be considered. Mountain lion may also cause concern for public safety if they encounter people.

Susan Harris
County of San Diego, Planning and Development Services
December 7, 2020
Page 16 of 35

Evidence impact would be significant: Human interactions are one of the main drivers of mortality and increasing development and human presence (even temporary) in this area could increase the need for public safety removal and/or vehicle strikes of mountain lions. If “take” or adverse impacts to mountain lion cannot be avoided either during project development activities or over the life of the development project, the project proponent must consult CDFW to determine if a CESA Incidental Take Permit (ITP) is required (pursuant to Fish & Game Code, § 2080 et seq.).

Recommendation #4: Impact analysis for mountain lion should be completed prior to Project implementation and included in the final EIR. A presence/absence survey should be completed, and results recorded in the final document.

Additional Recommendations

Recommendation #5: Landscaping – Habitat loss and invasive plants are a leading cause of native biodiversity loss. Invasive plant species spread quickly and can displace native plants, prevent native plant growth, and create monocultures. CDFW recommends that any landscaping (separate from mitigation for impacts to native vegetation communities) performed after the Project use native plants. The County should not plant, seed, or otherwise introduce invasive exotic plant species to landscaped areas that are adjacent and/or near native habitat areas.

CDFW recommends using native, locally appropriate plant species and drought tolerant, lawn grass alternatives to reduce water consumption. Information on alternatives for invasive, nonnative, or landscaping plants may be found on the California Invasive Plant Council’s, Don’t Plant a Pest webpage (Cal-IPC 2020). The Audubon Society’s Native Plants Database is a resource to identify native plants and trees that will attract and benefit birds. Birds may help to control and reduce insects, reducing the need for pesticides (National Audubon Society 2020). The California Native Plant Society’s Gardening and Xerces Society’s Pollinator-Friendly Native Plant Lists webpage has information on native plant species that invite insects and pollinators (CNPS 2020b; Xerces Society 2020). Pollinators are critical components of our environment and essential to our food security. Insects – and primarily bees – provide the indispensable service of pollination to more than 85% of flowering plants (Ollerton et al. 2011)

Recommendation #6: Project Alternatives – CDFW recommends the Project consider alternative designs to alleviate the need to grade native habitat. CDFW recommends the County consider alternative areas or configurations for the placement of the two water tanks, engine generator enclosures, and engine coolers. Construction and grading activities should be relocated to already disturbed land and existing roads/trails. This could avoid or minimize potential impacts to native vegetation communities on the south-facing slopes that may support rare plants and special status wildlife species. Project alternatives should avoid or otherwise minimize direct and indirect impacts to sensitive biological resources. A project alternative should be considered even if an alternative would impede to some degree the attainment of the Project objectives or would be more costly (CEQA Guidelines, § 15126.6).

Susan Harris
County of San Diego, Planning and Development Services
December 7, 2020
Page 17 of 35

CONCLUSION

The CDFW appreciates the opportunity to comment on the DEIR to assist the County in identifying and mitigating Project impacts on biological resources.

Questions regarding this letter or further coordination should be directed to Melanie Burlaza, Environmental Scientist at MelanieAnne.Burlaza@wildlife.ca.gov.

Sincerely,

DocuSigned by:

D700B4520375406...

David Mayer
Environmental Program Manager I
South Coast Region

Ec: CDFW

Karen Drewe, San Diego – Karen.Drewe@wildlife.ca.gov
Kelly Fisher, San Diego – Kelly.Fisher@wildlife.ca.gov
Susan Howell, San Diego – Susan.Howell@wildlife.ca.gov
Jenny Ludovissy, San Diego – Jennifer.Ludovissy@wildlife.ca.gov
CEQA Program Coordinator, Sacramento – CEQACommentLetters@wildlife.ca.gov

State Clearinghouse, Sacramento – State.Clearinghouse@opr.ca.gov
Jonathan Snyder, USFWS – Jonathan_Snyder@fws.gov

References

1. California Environmental Quality Act (CEQA). 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.
2. California Office of Planning and Research. 2009 or current version. CEQA: California Environmental Quality Act. Statutes and Guidelines, § 21081.6 and CEQA Guidelines, § 15097, §15126.4(2)
3. Fish & Game Code §3503
4. County of San Diego Multiple Species Conservation Plan,
<https://www.sandiegocounty.gov/content/sdc/pds/mscp/sc/docsmaps.html#docs>
5. California Invasive Plant Council. 2020. Don't Plant a Pest. Alternatives to invasive horticultural plants. Available from:
<https://www.calipc.org/solutions/prevention/landscaping/dpp/>.
6. California Department of Fish and Wildlife. 2020. California Natural Diversity Database. Accessed at: <https://wildlife.ca.gov/Data/CNDDB>.
7. California Department of Fish and Wildlife. 2020. Scientific Collecting Permit. Available from: <https://wildlife.ca.gov/Licensing/Scientific-Collecting#53949678>.
8. California Department of Fish and Wildlife. 2018. Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Sensitive Natural Communities. Available from: <https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=18959&inline>.

Susan Harris
County of San Diego, Planning and Development Services
December 7, 2020
Page 18 of 35

9. [CNPSa] California Native Plant Society. 2020. CNPS Rare Plant Ranks. Accessed at: <https://www.cnps.org/rare-plants/cnps-rare-plant-ranks>
10. [CNPS] California Native Plant Society. 1998. Statement Opposing Transplantation as Mitigation for Impacts to Rare Plants. Available from: <https://www.cnps.org/wpcontent/uploads/2018/04/transplanting2.pdf>
11. Montana Fish, Wildlife, and Parks. 2012. A Landowner's Guide to Wildlife Friendly Fences: How to Build Fence with Wildlife in Mind. Available from: <https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=134713&inline>
12. [CNPSb] California Native Plant Society. 2020. Gardening and Horticulture. Available from: <https://www.cnps.org/gardening>.
13. National Audubon Society. 2020. Native Plants Database. Available from: <https://www.audubon.org/native-plants>.
14. Ollerton J., Winfree, R., and S. Tarrant. 2011. How many flowering plants are pollinated by animals? *Oikos* 120:321-326.
15. Sawyer, J.O., Keeler-Wolf, T., and Evens J.M. 2008. A manual of California Vegetation, 2nd ed. ISBN 978-0-943460-49-9.
16. [Xerces Society] Xerces Society for Invertebrate Conservation. 2020. Pollinator-Friendly Native Plant Lists. Available from: <https://xerces.org/pollinator-conservation/pollinator-friendlyplant-lists>.
17. Johnston D., Tatarian G., and Pierson E. 2004. California Bat Mitigation Techniques, Solutions and Effectiveness. Available from: http://www.wildliferesearchassoc.com/wp-content/uploads/2017/05/California_Bat_Mitigation_CalTrans_2004-1.pdf
18. O'Leary K. et al. 2017. Sustainability of Utility-Scale Solar Energy- Critical Ecological Concepts. *Front Ecol Environ* 2017; 15(7): 385– 394, doi:10.1002/fee.1517
19. Leroy J. Walston, Katherine E. Rollins, Kirk E. LaGory, Karen P. Smith, Stephanie A. Meyers, 2016. A preliminary assessment of avian mortality at utility-scale solar energy facilities in the United States. *Renewable Energy*. Available from: <https://doi.org/10.1016/j.renene.2016.02.041>.

Susan Harris
 County of San Diego, Planning and Development Services
 December 7, 2020
 Page 19 of 35

Attachment A

Recommended Mitigation Measures:

Biological Resources			
Issue	Mitigation Measure	Timing	Responsible Party
<p>Impacts to Vegetation Communities: The DEIR proposes to mitigate 96.09 acres of desert saltbush scrub out-of-kind. This habitat type is associated with a number of special status species such as glossy snake and burrowing owl, and a potential burrowing owl burrow was detected onsite within this habitat type.</p>	<p>Mitigation Measure #1: CDFW recommends that the project proponent restore or create habitat onsite or offsite at no less than 2:1 for permanent impacts to desert saltbrush scrub. For mitigation through participation in a mitigation bank, CDFW recommends no less than 3:1 for permanent impacts for this vegetation community.</p> <p>CDFW's recommended ratio is higher to account for loss of seed bank and risk of failure. High attrition and low survivorship of native seedlings may occur. Moreover, the ratio is higher to account for the temporal loss of habitat. This may be multiple years, from the moment of impact to until the project proponent is able to restore/create self-sustaining habitat that is similar in species abundance, composition, density, and coverage to the habitat impacted. CDFW recommends habitat restoration or creation in areas suitable to support plant species found in desert saltbush scrub. Mitigation should not occur on where physical and/or biological factors (e.g., soils, slope) are not suitable to support desert saltbush scrub.</p>	<p>Prior to/After Project construction and activities</p>	<p>County of San Diego</p>
<p>Impacts to Special Status Plants:</p>	<p>Recommendation #1: CDFW generally does not support the</p>	<p>During and after Project</p>	<p>County of San Diego</p>

Susan Harris
 County of San Diego, Planning and Development Services
 December 7, 2020
 Page 20 of 35

<p>CDFW does not consider transplanting or salvaging sensitive plants (pygmy lotus and sticky geraea) within a development as appropriate mitigation for rare plants, and moving it to a new location. The DEIR does not provide sufficient detail for the mitigation for these plants.</p>	<p>use of translocation or transplantation as the primary mitigation strategy for unavoidable impacts to species. Studies have shown that these efforts are experimental and the outcome unreliable (CNPS 1998). CDFW has found that permanent preservation and management of habitat capable of supporting these species is often a more effective long-term strategy for conserving sensitive plants. Furthermore, we recommend that the EIR include specific provisions for mitigation for these plants in the RMP, to include details on the use of a qualified restoration specialist, the dates restoration is to take place, and the exact locations for restoration. We recommend further research to determine the best conservation and restoration strategy for these plant species, as many plants have higher survivorship when seeded rather than transplanted. In addition, "suitable mitigation lands" should be specified within the EIR and future RMP.</p>	<p>construction and activities</p>	
<p>Impacts to Species of Special Concern: Impacts to SSC are discussed in section 2.3.3.2, labeled Impact BI-W-1 and BI-W-2. The DEIR proposes mitigation measures M-BI-1 (biological monitoring), M-BI-2 (temporary construction fencing, M-BI-3</p>	<p>Mitigation Measure #2: Scientific Collecting Permit – CDFW has the authority to issue permits for the take or possession of wildlife, including mammals; birds, nests, and eggs; reptiles, amphibians, fish, plants; and invertebrates (Fish & G. Code, §§ 1002, 1002.5, 1003). Effective October 1, 2018, a Scientific Collecting Permit is required to monitor project impacts on wildlife resources, as required by environmental</p>	<p>Prior to and during Project construction and activities</p>	<p>County of San Diego</p>

Susan Harris
County of San Diego, Planning and Development Services
December 7, 2020
Page 21 of 35

<p>(habitat preservation), M-BI-4 (RMP) and M-BI-5 (nesting bird survey) to avoid or minimize impacts to special status species. CDFW appreciates the intention behind these mitigation measures, but is concerned that the measures do not provide enough specificity to avoid or minimize impacts to special status species, specifically Species of Special Concern.</p>	<p>documents, permits, or other legal authorizations; and, to capture, temporarily possess, and relocate wildlife to avoid harm or mortality in connection with otherwise lawful activities (Cal. Code Regs., tit. 14, § 650). Please visit CDFW's Scientific Collection Permits webpage for information (CDFW 2020c).</p> <p>Pursuant to the California Code of Regulations, title 14, section 650, the County of San Diego/qualified biologist must obtain appropriate handling permits to capture, temporarily possess, and relocate wildlife to avoid harm or mortality in connection with Project construction and activities.</p> <p>Mitigation Measure #3: Species surveys – The County should retain a qualified biologist with experience surveying for southern California special status wildlife species. Prior to commencing any project construction and activities, including equipment and material staging, the qualified biologist should conduct surveys for where suitable habitat is present and directly impacted by project construction and activities, and construction equipment and vehicle access and parking. Surveys should place an emphasis towards identifying any Species of Special Concern (SSC) including (but not limited to) California glossy snake; loggerhead shrike; American badger; and San Diego desert woodrat. Focused surveys should</p>		
---	--	--	--

Susan Harris
County of San Diego, Planning and Development Services
December 7, 2020
Page 22 of 35

	<p>consist of a minimum of three daytime surveys and one nighttime survey no more than 7 days from the start of any project construction and activities.</p> <p>If SSC are detected, the qualified biologist should use visible flagging to mark the location where SSC was detected. The qualified biologist should take a photo of each location, map each location, and provide the specific species detected at that location. Flagging should be maintained for the duration of the project. The qualified biologist should provide a summary report of herpetofauna surveys to the County before any demolition, paving, soil compaction, and vegetation clearing work occurs.</p> <p>Mitigation Measure #4: Relocation Plan - The qualified biologist should prepare a species-specific list (or plan) of proper handling and relocation protocols and a map of suitable and safe relocation areas. The list (or plan) of protocols should be implemented during project construction and activities/biological construction monitoring. A qualified biologist may consult with CDFW to prepare species-specific protocols for proper handling and relocation procedures.</p> <p>Mitigation Measure #5: Worker Training and Field Protocols - During project construction and activities, the</p>		
--	--	--	--

Susan Harris
County of San Diego, Planning and Development Services
December 7, 2020
Page 23 of 35

	<p>qualified biologist should have prepared a map showing locations where SSC were detected and share this information to workers as part of the Worker Environmental Awareness Program (WEAP). The qualified biologist should communicate to workers that upon encounter with a SSC, work must stop, a qualified biologist must be notified, and work may only resume once a qualified biologist has determined that it is safe to do so. Any contractor or employee that inadvertently kills or injures a special-status animal, or finds one either dead, injured, or entrapped, should immediately report the incident to the qualified biologist and/or onsite representative identified in the WEAP.</p> <p>Monitoring by a qualified biologist will occur continuously during all ground disturbance work (i.e., demolition, paving, soil compaction, and grading), vegetation removal, and installation of the portion of the gas pipeline occurring in densely vegetated areas. Surveys for SSC should be conducted prior to the initiation of each day of vegetation removal activities in suitable habitat. Surveys for SSC should be conducted in the areas flagged in earlier surveys before construction and activities may occur in or adjacent to those areas. Work may only occur in these areas after a qualified biologist has determined it is safe to do so. Even so, workers should be</p>		
--	--	--	--

Susan Harris
County of San Diego, Planning and Development Services
December 7, 2020
Page 24 of 35

	<p>advised to work with caution near flagged areas. Once all ground disturbance work, vegetation removal, and pipeline installation are complete, monitoring will occur periodically for the duration of the project. If SSC is encountered, qualified biologist should safely relocate the animal per relocation and handling protocols.</p> <p>Mitigation Measure #6: Injured or Dead Wildlife - If any SSC are harmed during relocation or a dead or injured animal is found, work in the immediate area should stop immediately, the qualified biologist should be notified, and dead or injured wildlife documented immediately. The qualified biologist should contact the USFWS, CDFW, and the County by telephone by the end of the day, or at the beginning of the next working day if the agency office is closed. In addition, a formal report should be sent to the County, CDFW, and USFWS (as appropriate) within three calendar days of the incident or finding. The report should include the date, time of the finding or incident (if known), and location of the carcass or injured animal and circumstances of its death or injury (if known). Injured animals should be taken immediately to the nearest appropriate veterinary or wildlife rehabilitation facility. The qualified biologist should, immediately upon finding the remains or injured animal, coordinate with the onsite construction foreman to</p>		
--	---	--	--

Susan Harris
 County of San Diego, Planning and Development Services
 December 7, 2020
 Page 25 of 35

	<p>discuss the events that caused the mortality or injury, if known, and implement measures to prevent future incidents. Details of these measures should be included with the report. Work in the immediate area may only resume once the proper notifications have been made and additional mitigation measures have been identified to prevent additional injury or death. Species remains should be collected and frozen as soon as possible, and CDFW and USFWS, as appropriate, should be contacted regarding ultimate disposal of the remains.</p>		
<p>Impacts to Nesting Birds: M-BI-5(a) uses buffers to minimize impacts rather than fully avoiding impacts to nesting birds.</p>	<p>Mitigation Measure #7: CDFW recommends modifying Mitigation Measure M-BI5(a) to fully avoid impacts to nesting birds by conditioning the environmental document to provide the following language: "Project construction, equipment staging, mobilization, grading, ground disturbance activities, and vegetation removal shall be completed outside the avian breeding season. The County of San Diego will not perform any Project construction or activities or remove or otherwise disturb vegetation on the project site from February 15 to August 31, and as early as January 1, to avoid impacts to breeding/nesting birds and raptors."</p>	<p>Prior to Project construction and activities</p>	<p>County of San Diego</p>
<p>Impacts to Tricolored Blackbird: Per the map provided in Figure 2.3.7 of the</p>	<p>Mitigation Measure #8: Permanent impacts to occupied and adjacent foraging habitat should be offset by setting aside</p>	<p>Prior to Project construction and activities</p>	<p>County of San Diego</p>

Susan Harris
 County of San Diego, Planning and Development Services
 December 7, 2020
 Page 26 of 35

<p>DEIR, tricolored blackbirds are observed within the direct project footprint. It is unclear what indirect impacts the Project may have on this species.</p>	<p>replacement habitat to be protected in perpetuity under a conservation easement dedicated to a local land conservancy or other appropriate entity, that should include an appropriate non-wasting endowment to provide for the long-term management of mitigation lands. CDFW recommends that the County require a tricolored blackbird mitigation plan to be submitted to CDFW for review and comment prior to Project implementation.</p> <p>Recommendation #2: CDFW recommends monitoring for the tricolored blackbird within the easement area to ensure its intended habitat functionality. We also recommend that the final document includes an impact analysis to address the effect of heat from solar panels on tricolored blackbird.</p>		
<p>Impacts to Burrowing Owl: The DEIR states that burrowing owl was detected onsite, with one active burrow onsite and a second potential burrow onsite. Direct, indirect and cumulative impacts to burrowing owl are not fully discussed within the DEIR.</p>	<p>Mitigation Measure #9: To reduce impacts to burrowing owl, CDFW recommends that the Project adhere to CDFW's March 7, 2012, Staff Report on Burrowing Owl Mitigation. All survey efforts should be conducted prior to any project activities that could result in habitat disturbance to soil, vegetation or other sheltering habitat for burrowing owl. In California, the burrowing owl breeding season extends from 1 February to 31 August with some variances by geographic location and climatic conditions. Survey protocol for breeding season owl surveys states to conduct four survey visits: 1) at least one site visit between 15 February and 15</p>	<p>Prior to and during Project construction and activities</p>	<p>County of San Diego</p>

Susan Harris
 County of San Diego, Planning and Development Services
 December 7, 2020
 Page 27 of 35

	<p>April, and 2) a minimum of three survey visits, at least three weeks apart, between 15 April and 15 July, with at least one visit after 15 June.</p> <p>Mitigation Measure #10: Permanent impacts to occupied owl burrows and adjacent foraging habitat should be offset by setting aside replacement habitat to be protected in perpetuity under a conservation easement dedicated to a local land conservancy or other appropriate entity, that should include an appropriate non-wasting endowment to provide for the long-term management of mitigation lands. CDFW recommends that the County require a burrowing owl mitigation plan be submitted to CDFW for review and comment prior to Project implementation.</p> <p>Mitigation Measure #11: Project use of rodenticides that could result in direct or secondary poisoning to burrowing owl should be avoided.</p>		
<p>Impacts to Golden Eagle: Golden eagle are documented onsite. The DEIR also states that it does not appear that golden eagles utilize the BSA regularly; however, recent data from USGS indicates that this area has frequent documented presence of golden</p>	<p>Mitigation Measure #12: Additional impact analysis is requested to justify the DEIR conclusion that project impacts to golden eagle would not be significant. Due to shortcomings in the impact analysis, the DEIR should demonstrate how the required golden eagle nesting buffer of 4,000 feet will be met and how the Project will safeguard against golden eagle electrocution. The DEIR should include details on the design,</p>	<p>Prior to Project construction and activities</p>	<p>County of San Diego</p>

Susan Harris
 County of San Diego, Planning and Development Services
 December 7, 2020
 Page 28 of 35

<p>eagle. Additionally, the DEIR states that impacts to this species is unlikely due to their wide ranges; however, that statement is unsubstantiated and should therefore not be included in the impact analysis. Currently, the impact analysis for golden eagle is incomplete.</p>	<p>construction, installation and maintenance of transmission poles and solar panels and demonstrate how these will minimize impacts to golden eagle.</p> <p>Mitigation Measure #13: Project use of rodenticides that could result in direct or secondary poisoning to burrowing owl should be avoided</p>		
<p>Impacts to Bats: The Pallid bat is an SSC and County Group 2 species, and there is a known CNDDB occurrence overlapping the eastern boundary of the Project site. The DEIR also states there are records of pallid bats roosting in a bridge in Jacumba in 2014. M-BI-6 of the DEIR makes provisions for bat surveys and roost avoidance and exclusion. CDFW recommends further specificity to ensure protection of sensitive bat species.</p>	<p>Mitigation Measure #14: A biologist with expertise and experience with bats shall be retained as a Designated Bat Biologist. The Designated Bat Biologist shall have at least 3 years of experience in conducting bat habitat assessments, day roosting surveys, and acoustic monitoring, and have adequate experience identifying local bat species (visual and acoustic identification), type of habitat, and differences in roosting behavior and types (i.e., day, night, maternity).</p> <p>CDFW recommends the Designated Bat Biologist conduct bat surveys within the Biological Study Area (plus a 100-foot buffer as access allows) in order to identify potential habitat that could provide daytime and/or nighttime roost sites, and any maternity roosts. CDFW recommends using acoustic recognition technology to maximize detection of bats. Night roosts are typically utilized from the approach of sunset until sunrise. Maternity</p>	<p>Prior to and during Project construction and activities</p>	<p>County of San Diego</p>

Susan Harris
 County of San Diego, Planning and Development Services
 December 7, 2020
 Page 29 of 35

	<p>colonies, composed of adult females and their young, typically occur from spring through fall.</p> <p>A discussion of survey results, including negative findings, should be provided in the final environmental document. Depending on survey results (e.g., Species of Special Concern observed, roosts are detected,), the DEIR should discuss potentially significant effects of the proposed Project on the bats and include species specific mitigation measures to reduce impacts to below a level of significance (CEQA Guidelines, § 15125).</p> <p>Mitigation Measure #15: Update M-BI-6 language as stated above.</p>		
<p>Impacts to Quino Checkerspot Butterfly: Quino checkerspot butterfly is a federally endangered and County Group 1 species. This species is found only in western Riverside County, southern San Diego County, and northern Baja California, Mexico (USFWS 2003). Page 24 of the DEIR states that Quino checkerspot butterfly was observed during the 2019 rare plant survey in the southwestern</p>	<p>Recommendation #3: CDFW appreciates the completion of focused protocol Quino surveys and the avoidance of the occupied hilltop. However, it is unclear how far the occupied area is from the direct Project footprint, how these buffers will be maintained during construction and maintenance and impact analyses do not address indirect impacts to the Quino checkerspot butterfly. CDFW requests further provisions be made in the final document to address buffer requirements for this species during construction and operation of the facility, how this species will be monitored throughout the Project implementation and address mitigation for indirect impacts to this species.</p>	<p>Prior to Project and construction activities</p>	<p>County of San Diego</p>

Susan Harris
 County of San Diego, Planning and Development Services
 December 7, 2020
 Page 30 of 35

<p>portion of the Project site on a hilltop. The DEIR makes provisions to avoid the occupied hilltop; however, further discussion should be included in the final document to address indirect impacts to the species.</p>			
<p>Impacts to Aquatic and Riparian Resources: The DEIR acknowledges that direct or indirect impacts to aquatic and riparian resources may occur, warranting an LSA notification. Page 61 states that “removal of vegetation; grading; obstruction or diversion of water flow; adverse change in velocity, siltation, volume of flow, or runoff rate; placement of fill; placement of structures; construction of a road crossing; placement of culverts or other underground piping; any disturbance of the substratum; and/or any activity that may cause an adverse change in native species composition, diversity, and abundance” within CDFW streams.</p>	<p>Mitigation Measure #16: CDFW has concluded that the Project may result in the alteration of streams. For any such activities, the Project applicant (or “entity”) must provide notification to CDFW pursuant to Fish and Game Code, section 1600 et seq. Based on this notification and other information, CDFW determines whether a Lake and Streambed Alteration Agreement (LSA) with the applicant is required prior to conducting the proposed activities. Please visit CDFW’s Lake and Streambed Alteration Program webpage to for information about LSA notification and online submittal through the Environmental Permit Information Management System (EPIMS) Permitting Portal (CDFW 2020b). CDFW’s issuance of an LSA for a Project that is subject to CEQA will require CEQA compliance actions by CDFW as a Responsible Agency. As a Responsible Agency, CDFW may consider the CEQA document from the County for the Project. To minimize additional requirements by</p>	<p>Prior to Project construction and activities</p>	<p>County of San Diego</p>

Susan Harris
 County of San Diego, Planning and Development Services
 December 7, 2020
 Page 31 of 35

	<p>CDFW pursuant to Fish and Game Code, section 1600 et seq. and/or under CEQA, the CEQA document should fully identify the potential impacts to the stream or riparian resources and provide adequate avoidance, mitigation, monitoring, and reporting commitments for issuance of the LSA.</p> <p>Any LSA permit issued for the Project by CDFW may include additional measures protective of streambeds on and downstream of the Project site. The LSA may include further erosion and pollution control measures. To compensate for any onsite and offsite impacts to riparian resources, additional mitigation conditioned in any LSA may include the following: avoidance of resources, onsite or offsite creation, enhancement or restoration, and/or protection, and management of mitigation lands in perpetuity.</p>		
<p>Wildlife Movement and Edge Effects: CDFW is concerned that the DEIR does not recognize that this area may significantly contribute to regional wildlife movement and does not appropriately address fragmentation and edge effects of the Project.</p>	<p>Mitigation Measure #17: RMP- The DEIR proposes mitigation measure M-BI-3 (Habitat Preservation) to mitigate for impacts to wildlife movement. Page 43 of the DEIR states,</p> <p>“The biological open space will preserve in perpetuity 435 acres of habitat, located immediately adjacent to existing preserve lands located west of the project site that play a vital role in reducing</p>	<p>Prior to Project construction and activities</p>	<p>County of San Diego</p>

Susan Harris
County of San Diego, Planning and Development Services
December 7, 2020
Page 32 of 35

	<p>impacts to biological resources. The on-site mitigation area has been designed to maximize its biological function as part of a wildlife corridor and to sustain habitat connectivity,”</p> <p>However, CDFW is concerned that this measure does not adequately address the impacts to wildlife movement and edge effects caused by the Project. CDFW recommends that provisions be made in the future RMP to monitor habitat connectivity within the biological easement area, including the use of camera traps around the Project facility and the biological easement area to assess wildlife movement.</p> <p>Mitigation Measure #18: Lighting- CDFW appreciates that the Project makes provisions to reduce light pollution, but we further recommend removal of motion sensor lighting from the DEIR, as this type of lighting can deter wildlife and impede movement throughout the area. Night lighting can disrupt the circadian rhythms of many wildlife species. Therefore, if night lighting is required at entry points, we recommend low level lighting. All non-essential lighting should be eliminated. The Project should avoid or limit the use of artificial light during the hours of dawn and dusk, as these windows of time are when many wildlife species are most active.</p>		
--	--	--	--

Susan Harris
 County of San Diego, Planning and Development Services
 December 7, 2020
 Page 33 of 35

	<p>Mitigation Measure #19: Fencing- The Project site is located in a low-density area that could support wildlife movement across the broader landscape, sustaining both transitory and permanent wildlife populations. Accordingly, CDFW recommends that the County of San Diego consider permeable, wildlife friendly fencing. Wildlife impermeable fencing prevents or creates a barrier for the passage of wildlife from one side to the other. Chain link fences – a type of impermeable fencing - can create hazards and barriers for wildlife movement, seasonal migrations, and access to food and water. CDFW recommends reviewing A Landowner’s Guide to Wildlife Friendly Fences for additional information (Montana Fish, Wildlife and Parks 2012).</p>		
<p>Impacts to Mountain Lion: The DEIR did not identify the recent change in protection status of the mountain lion population and the potential for human-wildlife conflict during Project activities.</p>	<p>Recommendation #4: Impact analysis for mountain lion should be completed prior to Project implementation and included in the final EIR. A presence/absence survey should be completed, and results recorded in the final document.</p>	<p>Prior to Project construction and activities</p>	<p>County of San Diego</p>
<p>Landscaping</p>	<p>Recommendation #5: CDFW recommends that any landscaping (separate from mitigation for impacts to native vegetation communities) performed after the Project use native plants. The County</p>	<p>Prior to Project construction and activities</p>	<p>County of San Diego</p>

Susan Harris
 County of San Diego, Planning and Development Services
 December 7, 2020
 Page 34 of 35

	<p>should not plant, seed, or otherwise introduce invasive exotic plant species to landscaped areas that are adjacent and/or near native habitat areas.</p> <p>CDFW recommends using native, locally appropriate plant species and drought tolerant, lawn grass alternatives to reduce water consumption. Information on alternatives for invasive, nonnative, or landscaping plants may be found on the California Invasive Plant Council's, Don't Plant a Pest webpage (Cal-IPC 2020). The Audubon Society's Native Plants Database is a resource to identify native plants and trees that will attract and benefit birds. Birds may help to control and reduce insects, reducing the need for pesticides (National Audubon Society 2020). The California Native Plant Society's Gardening and Xerces Society's Pollinator-Friendly Native Plant Lists webpage has information on native plant species that invite insects and pollinators (CNPS 2020b; Xerces Society 2020). Pollinators are critical components of our environment and essential to our food security. Insects – and primarily bees – provide the indispensable service of pollination to more than 85% of flowering plants (Ollerton et al. 2011).</p>		
<p>Project Alternatives</p>	<p>Recommendation #6: CDFW recommends the Project consider alternative designs to alleviate the need to grade native habitat. CDFW</p>	<p>Prior to Project construction and activities</p>	<p>County of San Diego</p>

Susan Harris
County of San Diego, Planning and Development Services
December 7, 2020
Page 35 of 35

	<p>recommends the County consider alternative areas or configurations for the placement of the two water tanks, engine generator enclosures, and engine coolers. Construction and grading activities should be relocated to already disturbed land and existing roads/trails. This could avoid or minimize potential impacts to native vegetation communities on the south-facing slopes that may support rare plants and special status wildlife species. Project alternatives should avoid or otherwise minimize direct and indirect impacts to sensitive biological resources. A project alternative should be considered even if an alternative would impede to some degree the attainment of the Project objectives or would be more costly (CEQA Guidelines, § 15126.6).</p>		
--	--	--	--