



State of California – Natural Resources Agency
DEPARTMENT OF FISH AND WILDLIFE
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GAVIN NEWSOM, Governor
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Governor's Office of Planning & Research

August 12, 2021

August 13 2021

STATE CLEARINGHOUSE

Mr. Russell B. Leavitt
Central Contra Costa Sanitary District
5019 Imhoff Place
Martinez, CA 94553
RLeavitt@centralsan.org

Subject: Central San Solar Panel Array, Initial Study/Mitigated Negative Declaration, SCH No. 2021070215, Contra Costa County

Dear Mr. Leavitt:

The California Department of Fish and Wildlife (CDFW) received a Notice of Intent to Adopt a Mitigated Negative Declaration from the Central Contra Costa Sanitary District (Central San) for the Central San Solar Panel Array Project (Project) pursuant to the California Environmental Quality Act (CEQA).

CDFW is submitting comments on the Initial Study/Mitigated Negative Declaration (IS/MND) to inform Central San, as the Lead Agency, of our concerns regarding potentially significant impacts to sensitive resources associated with the proposed Project. CDFW is providing these comments and recommendations regarding those activities involved in the Project that are within CDFW's area of expertise and relevant to its statutory responsibilities (Fish and Game Code, § 1802), and/or which are required to be approved by CDFW (CEQA Guidelines, §§ 15086, 15096 and 15204).

CDFW ROLE

CDFW is a Trustee Agency with responsibility under CEQA (Pub. Resources Code, § 21000 et seq.) pursuant to CEQA Guidelines section 15386 for commenting on projects that could impact fish, plant, and wildlife resources. CDFW is also considered a Responsible Agency if a project would require discretionary approval, such as a California Endangered Species Act (CESA) Permit, a Lake and Streambed Alteration (LSA) Agreement, or other provisions of the Fish and Game Code that afford protection to the state's fish and wildlife trust resources.

REGULATORY REQUIREMENTS

California Endangered Species Act

CESA prohibits unauthorized take of candidate, threatened, and endangered species. Therefore, if take¹ of any species listed under CESA cannot be avoided either during

¹ Fish and Game Code §86: "Take" means hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill.

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Project activities or over the life of the Project, a CESA Incidental Take Permit (ITP) is warranted (pursuant to Fish and Game Code Section 2080 *et seq.*). Issuance of a CESA ITP is subject to CEQA documentation; therefore, the CEQA document should specify impacts, mitigation measures, and a mitigation monitoring and reporting program. If the proposed Project will impact any CESA-listed species, early consultation is encouraged, as significant modification to the Project and mitigation measures may be required to obtain a CESA ITP. More information on the CESA permitting process can be found on the CDFW website at <https://www.wildlife.ca.gov/Conservation/CESA>.

Lake and Streambed Alteration

CDFW requires an LSA Notification, pursuant to Fish and Game Code section 1600 *et seq.*, for Project activities affecting lakes or streams and associated riparian habitat. Notification is required for any activity that may substantially divert or obstruct the natural flow; change or use material from the bed, channel, or bank including associated riparian or wetland resources; or deposit or dispose of material where it may pass into a river, lake or stream. Work within ephemeral streams, washes, watercourses with a subsurface flow, and floodplains are subject to notification requirements. CDFW will consider the CEQA document for the Project and may issue an LSA Agreement. CDFW may not execute the final LSA Agreement (or ITP) until it has complied with CEQA as a Responsible Agency.

Migratory Birds and Raptors

CDFW also has jurisdiction over actions that may result in the disturbance or destruction of active nest sites or the unauthorized take of birds. Fish and Game Code Sections protecting birds, their eggs, and nests include 3503 (regarding unlawful take, possession or needless destruction of the nests 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). Fully protected species may not be taken or possessed at any time (Fish and Game Code Section 3511).

PROJECT DESCRIPTION SUMMARY

Proponent: Central Contra Costa Sanitary District

Objective: The Project would construct and operate a 1.75-megawatt solar panel array on approximately 8.2 acres of a 48-acre parcel owned by Central San, hereby referred to as the "Lagiss Parcel." The proposed solar panel array would be accessed from the northern end of Blum Road via extension of an existing private driveway. The proposed solar panel array would be encircled by a service road and perimeter fence. The existing surface area to be covered by the proposed ground-mounted solar panel modules is approximately 2.5 acres. Combined, solar panel modules together with the service road and driveway, the area covered is approximately 4.0 acres of the 8.2

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acres. The remainder (4.2 acres) is generally retention basins or aisle space between rows of panels, with only minor area being used for inverters; panelboards; main photovoltaic (PV) switchboard; step-down, pad-mounted transformer; and intertie switchgear.

Location: The Project is located at 4451 Blum Road in an unincorporated area of Martinez, California 94553, within Contra Costa County. The Project will occur on Assessor's Parcel Number 159-140-042-7. The approximate Project center coordinate is Latitude 38.006693, Longitude -122.073393.

Timeframe: The Project is planned to commence September 2021 be completed by January 2022.

ENVIRONMENTAL SETTING

The Project site is located within a parcel currently being utilized for grazing by cattle and horses. This grazing area is comprised of non-native grassland with intermixed forbs and a stand of oak woodland to the northeast of the Project site which provides potential habitat for nesting birds and roosting bats. Also, within and adjacent to the grazing area are wetland depressions, palustrine wetlands, and vernal pools, all of which support obligate and facultative wetland plants and provide potential habitat for rare plants such as Congdon's tarplant (*Centromadia parryi* ssp. *congdonii*). On and adjacent to the Project site are active colonies of fossorial mammals including, but not limited to, California ground squirrel (*Otospermophilus beecheyi*), which is a surrogate species for the burrowing owl (*Athene cunicularia*). Overland flow, pooling, and ponding areas to the north of the Project hold the potential to drain into a tributary of, and the salt marshes and sloughs of, Pacheco Creek.

The Project site is immediately surrounded by mowed grasslands to the east, industrial usage adjacent to salt marsh areas to the north, and mixed residential and industrial use to the west, south, and southeast. The immediate neighboring properties contain native and ornamental trees, and other vegetation and infrastructure, that provide potential nesting habitat for birds and potential roosting habitat for bats. Adjacent properties contain public and privately owned open space areas comprised of annual grassland, salt marsh, riparian oak woodland, and coyote brush scrub. Within a two-mile radius are designated open space areas including portions of the Martinez Park Reserve and the Waterbird Regional Preserve. These neighboring, adjacent, and two-mile radii private and public open space areas hold potential habitat and positive occurrence records of special-status species, including but not limited to, the State Species of Special Concern the burrowing owl (Simi, 2008), the 1B.1 rare plant on the California Native Plant Society's Rare Plant Ranking system Congdon's tarplant (Mardesich & Powell, 2005), and the State Species of Special Concern the Suisun song sparrow (*Melospiza melodia maxillaris*) (Museum of Vertebrate Zoology, 2005).

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COMMENTS AND RECOMMENDATIONS

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

Impacts to Burrowing Owls

Whereas the MND does identify significant impacts to burrowing owls caused by the Project, the Mitigation Measures III-2A and III-2B provided on page 28 of the MND seeks avoidance and minimization of acute impacts to individuals yet does not compensate or mitigate for the loss of nesting and foraging habitat caused by the Project. The Project has the potential to adversely impact the species through permanent and temporary losses of nesting and foraging habitat. Please note that the permanent loss of habitat for the species is considered significant in and of itself and should be mitigated regardless of the current level of disturbance or reconnaissance survey results. The Project may also result in additional impacts to burrowing owls through nest abandonment, loss of young, and reduced health and vigor of owlets (resulting in reduced survival rates) and breeding and foraging disturbance through the operation of Project activities, both during and after construction.

Please be advised that CDFW does not consider exclusion of burrowing owls or passive relocation as a take avoidance, minimization, or mitigation method, and considers exclusion as a significant impact. The long-term demographic consequences of exclusion techniques have not been thoroughly evaluated, and the survival rate of evicted or excluded owls is unknown. All possible avoidance and minimization measures should be considered before temporary or permanent exclusion and closure of burrows is implemented in order to avoid take. While active relocation is not considered as take avoidance, minimization, or mitigation, if avoiding impacts to burrowing owls is not possible, active relocation of burrowing owls can be performed as a tool in conjunction with compensatory mitigation. Active relocation will require a relocation plan that includes owl banding, success criteria, long-term monitoring, management, and reporting in order to evaluate the success of the technique and determine the survival rate of relocated owls.

To ensure impacts to burrowing owls are mitigated to less-than-significant, CDFW recommends the MND should incorporate specific and enforceable avoidance and minimization measures to avoid and minimize take of burrowing owls, eggs, owlets, and nesting and foraging habitat. These measures should include: 1) a restricted work window; 2) biological monitoring throughout the course of the Project; 3) in accordance with the *2012 CDFW Staff Report on Burrowing Owl Mitigation* (available at: <https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=83843>), a minimum of four survey visits should be conducted within 500 feet of the Project area during the owls' breeding season which is typically between February 1 and August 31 by qualified biologists; and

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4) inclusion of compensatory mitigation in the form of conserved lands for burrowing owl habitat impacts. At a minimum, mitigation ratios for these habitat impacts should be at 3:1 (conservation to loss) for permanent impacts, and 1:1 (conservation to loss) for temporary impacts. Conserved lands for owls should include presence of burrowing owls and ground squirrel burrows, well-drained soils, abundant and available prey within proximity to burrows, as well as foraging, wintering, and dispersal areas. The location of mitigation areas for burrowing owls should be approved by CDFW prior to the start of project-related activities. Conservation lands should be placed under a Conservation Easement with CDFW listed as a third-party beneficiary and an endowment should be funded for managing the lands for the benefit of the species in perpetuity. Additionally, a long-term management plan should be prepared and implemented by a land manager and approved by CDFW. The grantee of the Conservation Easement should be an entity that has gone through the due diligence process for approval by CDFW to hold or manage conservation lands.

General Avian and Bat Impacts

The MND should evaluate the cumulative effects of loss of habitat as an indirect cause of avian mortality for grassland birds. Breeding Bird Surveys (BBS) conducted by the U.S. Geological Survey Biological Resources Division and volunteers throughout the country show that grassland birds, as a group, have declined more than other groups, such as forest and wetland birds (Brennan and Kuvlesky 2005; NRCS 1999). The BBS shows that in California, grassland birds such as the western meadowlark (*Sturnella neglecta*), and State Species of Special Concern the burrowing owl, have shown population declines since 1966 (Sauer et al., 2019). CDFW recommends at a minimum an equal amount of land with primary purpose of habitat conservation should be enhanced and conserved elsewhere to offset the loss of habitat for grassland birds.

In addition, although avian interactions with PV facilities are not well researched, the primary threats appear to be from collisions and electrocutions. Collisions with PV equipment can include direct collisions into guy wires or transmission lines. Other collisions are less understood such as the “lake effect” (i.e., perception of PV surfaces as waterbodies), first described in Horváth et al. (2009). Utility-scale PV facilities may attract migrating waterfowl and shorebirds through the “lake effect”, where birds and/or insects mistake a reflective solar facility for a waterbody and collide with the structures as they attempt to land on the panels. Injuries from collisions with collectors/reflectors may result in acute and direct take (Kagan et al. 2014), or stranding. Stranding can occur when an individual is injured by collision impact and is unable to take off or when they require a running start on the water’s surface. The MND should include measures to reduce the risks of avian collisions such as adding special patterns to the PV panels.

Linear features such as generator-tie lines, collector lines, and interior and perimeter fences all present collision hazards for birds, and electric lines present a potential

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electrocution hazard (Huso, et al. 2016). All aboveground lines should be fitted with bird flight diverters or visibility enhancement devices. When lines, or other related infrastructure with the potential to cause take, cannot be placed underground, appropriate avian protection designs should be employed. As a minimum requirement, the collection system should conform with the most current edition of the Avian Power Line Interaction Committee guidelines to prevent electrocutions, found at: <https://www.aplic.org/mission>.

The MND should include a requirement for weekly or twice-weekly avian mortality surveys to meet the following objectives:

- Estimate the total number of birds and bats killed at the Project site within a specified time period.
- Determine whether there are spatial or temporal/seasonal patterns of total bird fatality.
- Evaluate species composition and which taxonomic groups may be at risk.
- Provide results that allow comparisons with other solar sites and to evaluate changes in fatality due to adaptive management.

The MND should include a requirement to develop an Avian and Bat Protection Plan or Bird and Bat Conservation Strategy (BBCS) in coordination with the U.S. Fish and Wildlife Service (USFWS) and CDFW. The purpose of the BBCS is to:

- Describe baseline conditions for bird and bat species present within the Project site, and adjacent where influenced by the Project, including results of site-specific surveys.
- Assess potential risk to birds and bats based on the proposed activities.
- Specify conservation measures that will be employed to avoid, minimize, and/or mitigate any potential adverse effects to these species.
- Describe the incidental monitoring and reporting that will take place during construction.
- Provide details for post-construction monitoring.
- Specify the adaptive management process that will be used to address potential adverse effects on avian and bat species.

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ENVIRONMENTAL DATA

CEQA requires that information developed in environmental impact reports and negative declarations be incorporated into a database which may be used to make subsequent or supplemental environmental determinations. [Pub. Resources Code, § 21003, subd. (e)]. Accordingly, please report any special-status species and natural communities detected during Project surveys to the CNDDDB. The CNDDDB field survey form, online field survey form, and contact information for CNDDDB staff can be found at the following link: <https://wildlife.ca.gov/data/CNDDDB/submitting-data>.

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 and Game Code, § 711.4; Pub. Resources Code, § 21089).

CONCLUSION

To ensure significant impacts are adequately mitigated to a level less-than-significant, the feasible mitigation measures described above should be incorporated as enforceable conditions into the final CEQA document for the Project. CDFW appreciates the opportunity to comment on the IS/MND to assist Central San in identifying and mitigating Project impacts on biological resources.

Questions regarding this letter or further coordination should be directed to Andrew Chambers, Environmental Scientist, at (707) 266-2878 or Andrew.Chambers@wildlife.ca.gov; or Melissa Farinha, Environmental Program Manager, at (530) 351-4801 or Melissa.Farinha@wildlife.ca.gov.

Sincerely,

DocuSigned by:

Stacy Sherman

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Stacy Sherman

Acting Regional Manager
Bay Delta Region

cc: Office of Planning and Research, State Clearinghouse (SCH No. 2021070215)

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