



State of California – Natural Resources Agency
DEPARTMENT OF FISH AND WILDLIFE
Northern Region
601 Locust Street
Redding, CA 96001
www.wildlife.ca.gov

GAVIN NEWSOM, Governor
CHARLTON H. BONHAM, Director



February 12, 2024

Governor's Office of Planning & Research

Feb 12 2024

STATE CLEARINGHOUSE

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**SUBJECT: DARRAH SPRINGS SOLAR PROJECT, STATE CLEARING HOUSE NUMBER
[2024010296](#)¹, SHASTA COUNTY**

Dear Terry Ash,

The California Department of Fish and Wildlife (CDFW) has reviewed the California Department of General Services (Lead Agency) Draft Initial Study and Mitigated Negative Declaration (ISMND), for the above-referenced project (Project). CDFW appreciates this opportunity to comment on the Project, pursuant to the California Environmental Quality Act (CEQA) Guidelines².

CDFW's Role

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

¹ <https://ceqanet.opr.ca.gov/2024010296>

² CEQA is codified in the California Public Resources Code in section 21000 et seq. The "CEQA Guidelines" are found in Title 14 of the California Code of Regulations, commencing with section 15000.

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

CDFW is also submitting comments as a Responsible Agency under CEQA (Public Resources Code, § 21069; CEQA Guidelines, § 15381). CDFW expects that it may need to exercise regulatory authority as provided by the Fish and Game Code. 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 and G. Code, § 2050 et seq.), or state listed rare plants pursuant to the Native Plant Protection Act (NPPA; Fish and G. Code § 1900 et seq.) authorization as provided by the applicable Fish and Game Code will be required.

Project Description

The Project, as described in the ISMND, is as follows:

ForeFront Power LLC proposes to develop a solar photovoltaic power generation system to be located within the Darrah Spring Fish Hatchery facility. The 738 ground-mounted solar arrays would occupy approximately 59,500 square feet and will convert sunlight to direct current electrical power which would then be converted to alternating current by string inverters before being delivered to the PG&E distribution system. The total system size is expected to be approximately 321 kilowatts (kW). The solar system would be configured into three generally contiguous arrays that are laid-out to avoid impacts to natural resources. The solar system would utilize either fixed-tilt or single-axis tracking mounting technology to optimize efficiency and performance. Single-axis trackers are designed to rotate the arrays in the east-to-west plane to track the sun’s movement across the horizon. Once installed, the ground-mounted solar arrays would be approximately 8 feet in height depending on the time of day to the extent a tracking system is utilized. A security fence (totaling 1,050 linear feet) would be installed around the solar arrays. Conduits and wires would be buried in trenches that run between rows and/or installed above-grade running along the backside of strings to connect the output of each string to the inverters. String inverters would be attached to racking adjacent to each array to convert electricity from direct current to alternating current. The inverters then send alternating current electricity to an on-site transformer to step the electricity up to the interconnection voltage. The Project is located at 29661 Wildcat Rd, Paynes Creek, CA, Assessor Parcel Number (APN) is 704-240-003.

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Comments and Recommendations

CDFW offers the comments and recommendations below to assist the Lead Agency in adequately identifying, avoiding, minimizing and/or mitigating the Project's significant, or potentially significant, direct, and indirect impacts on biological resources. Editorial comments are also included to improve the document.

Crotch's Bumble Bee

The California Fish and Game Commission accepted a petition to list Crotch's bumble bee (*Bombus crotchii*) as endangered under CESA, advancing the species to the candidacy stage of the CESA listing process on September 30, 2022. Crotch's bumble bee is granted full protection as a threatened species under CESA. Take of any endangered, threatened, or candidate species that results from the Project is prohibited, except as authorized by State law (Fish & G. Code, §§ 86, 2062, 2067, 2068, 2080, 2085; Cal. Code Regs., tit. 14, § 786.9). Additionally, Crotch's bumble bee has a state ranking of S1/S2 - imperiled/critically imperiled and extremely rare (often five or fewer populations) and Crotch's bumble bee is listed as an invertebrate of conservation priority under the [Terrestrial and Vernal Pool Invertebrates of Conservation Priority](#)³.

According to CDFW's [Biogeographic Information and Observation System](#)⁴ this Project occurs within the range of Crotch's bumble bee and based on the ISMND's description of habitat, the Project area may contain suitable nesting and foraging habitat. A habitat assessment, protocol survey, and impact analysis for Crotch's bumble bee were not included in the ISMND, or in Appendix B of the ISMND, Biological Resource Assessment, however, the temporal or permanent loss of suitable nesting and foraging habitat may impact Crotch's bumble bee. Additionally, ground-disturbing Project activities may cause death or injury of adults, eggs, and larva; burrow collapse; nest abandonment; and reduced nest success.

CEQA Guidelines Section 15065-15065.7 outlines the Lead Agency's responsibility to evaluate impacts on plant and animal species, including those that are CESA listed. Due to potentially suitable habitat within the Project site, a habitat assessment and impact analysis should be included in the final ISMND

³ <https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=149499&inline>

⁴ <https://wildlife.ca.gov/Data/BIOS>

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(Recommendation #1). If the habitat assessment results in suitable habitat, and temporal and/or permanent impacts to Crotch's bumble bee are anticipated, bumble bee surveys should be performed (**Recommendation #2**). Within one year prior to vegetation removal and/or grading, CDFW recommends that a qualified biologist familiar with Crotch's bumble bee behavior and life history, should conduct surveys to determine if Crotch's bumble bee is present. Surveys should be conducted during flying season when the species is most likely to be detected above ground, between March 1 and September 1. Surveys should be conducted within the Project site and areas adjacent to the Project site where suitable habitat exists. Survey results, including negative findings, should be reported to the [California Natural Diversity Database](#)⁵ (CNDDDB). The [June 2023 Survey Considerations for CESA Candidate Bumble Bee Species](#)⁶ is a useful resource for performing adequate habitat assessments and determining appropriate survey guidelines (**Recommendation #3**).

Absence of occurrence records should not be interpreted as absence of the species at or near a given site and all species with potential to occur should be analyzed. Specific to bumble bees, records should be evaluated by consulting a combination of reliable data sources including the occurrence database for the [Bumble bees of North America](#)⁷ (which can be requested from its curator Dr. Leif Richardson), citizen science data platforms that have been verified such as [iNaturalist](#)⁸ and [Bumble Bee Watch](#)⁹. Floral resources in bloom from February to October may, at the very least, have potential to support Crotch's bumble bee queens, with a known flight season between February and March¹⁰.

California Endangered Species Act

Please be advised that a [CESA permit](#)¹¹ must be obtained if the Project has the potential to result in "take" (hunt, pursue, catch, capture, kill, or attempt thereof) of plants or animals listed under CESA, either during construction or over the life of the project. Issuance of a CESA permit is subject to CEQA

⁵ <https://wildlife.ca.gov/Data/CNDDDB/Submitting-Data>

⁶ <https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=213150&inline>

⁷ <https://www.leifrichardson.org/bumble-bees-of-north-america.html>

⁸ <https://www.inaturalist.org/>

⁹ <https://www.bumblebeewatch.org/>

¹⁰ California Department of Fish and Wildlife. June 6, 2023. Survey Considerations for California Endangered Species Act (CESA) Candidate Bumble Bee Species. Available here:

<https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=213150&inline>

¹¹ <https://wildlife.ca.gov/Conservation/CESA/Permitting/Incidental-Take-Permits>

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documentation; the CEQA document must specify impacts, mitigation measures, and a mitigation monitoring and reporting program. If the Project has the potential to result in the take of a CESA-listed species, early consultation is encouraged, as significant modification to the Project may be necessary to minimize and fully mitigate impacts as required by Fish and Game Code Section 2081 (b)(2).

Wildlife Friendly Fencing

The ISMND states permanent security fencing will be installed. CDFW understands fences are essential for human safety and the control of trespass however, inappropriately designed and/or installed fencing may create serious hazards for wildlife. Therefore, CDFW encourages the Lead Agency to consider designing and constructing perimeter fencing with wildlife friendly fencing techniques, to reduce the potential of injury or death (**Recommendation #4**). Please consult [A Landowner's Guide to Wildlife Friendly Fences: How to Build Fence with Wildlife in Mind](#)¹² for construction recommendations and use of wildlife friendly fencing. CDFW staff are also available to assist in providing further recommendations for effective wildlife friendly fencing techniques.

Solar Facilities and Avian Collisions

Resident and/or migrant birds may collide with solar panels or related infrastructure. Due to their reflective surfaces, birds often mistake solar arrays for water or open space. Flocks of birds, especially those that are piscivorous, are often attracted to fish hatcheries because they offer an abundant and easily accessible food source, which may increase the potential for collision. Such impacts would be ongoing for the life of the Project and may be significant. CDFW recommends the formulation of a comprehensive collision risk assessment including an impact analysis and the proposal of avoidance, minimization, and mitigation measures to reduce potentially significant impacts to less than significant (**Recommendation #5**). CDFW staff are available to review the risk assessment and impact analysis, and to provide comments and recommendations, preferably prior to the release of the draft environmental document. CDFW staff are also available to review and assist on future mitigation plan preparation.

¹² <https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=161708>

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Summary of Recommendations

- 1) Due to potentially suitable habitat within the Project site, CDFW recommends including a habitat assessment and impact analysis for Crotch's bumble bee in the final ISMND.
- 2) If the habitat assessment results in the presence of suitable habitat, and temporal and/or direct impacts to Crotch's bumble bee are anticipated, CDFW recommends a qualified biologist conduct bumble bee surveys.
- 3) CDFW recommends bumble bee habitat assessments and surveys follow CDFW's June 2023 Survey Considerations for California Endangered Species Act (CESA) Candidate Bumble Bee Species.
- 4) CDFW recommends designing and constructing perimeter fencing with wildlife friendly fencing techniques.
- 5) Due to the potential for avian collision for the life of the Project, CDFW recommends the formulation of a comprehensive collision risk assessment including an impact analysis and the proposal of avoidance, minimization, and mitigation measures to reduce potentially significant impacts to less than significant.

Editorial Comments

Section 1.3 Surrounding Land Uses/Environmental Setting

On Page 1-2 the ISMND states "...a handful of single-family residences directly north of the Site for seasonal workers of the facility...". Please note that the single-family residences are occupied by full-time permanent staff year-round.

Section 4.5.6 Cultural Resources

On Page 4-31 the ISMND states "*The archaeologist shall notify the Fresno County Coroner (per §7050.5 of the Health and Safety Code).*" This Project is located in Shasta County.

Future CEQA Consultation


CDFW would like to emphasize that our staff are available for consultation at every stage of the project development process. CDFW strongly encourages the Lead Agency to consult with CDFW before and during the development of future projects and those equivalent CEQA documents, specifically regarding the analyses of biological resources and the formulation of avoidance, minimization, and mitigation measures for such resources. Engaging with CDFW early-on plays a critical role in allowing our agency to fulfill our mandate to conserve California's valuable fish and wildlife resources and will simultaneously aid the Lead Agency in an efficient and comprehensive CEQA review.

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Conclusion

CDFW appreciates the opportunity to comment on the Project to assist the Lead Agency in adequately analyzing and minimizing impacts to biological resources. If you have any questions regarding the information above, or for future CEQA consultation requests, please contact Erika Iacona, Senior Environmental Scientist, by email at R1CEQARedding@wildlife.ca.gov.

Sincerely,

DocuSigned by:

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Tina Bartlett, Regional Manager
Northern Region

cc: State Clearinghouse
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Erika Iacona
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