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DEPARTMENT OF FISH AND WILDLIFE  
North Central Region  
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**GAVIN NEWSOM, Governor**  
**CHARLTON H. BONHAM, Director**



December 2, 2024

Kevin Messerschmitt  
Senior Planner  
Sacramento County  
827 7<sup>th</sup> Street, Room 225  
Sacramento, CA 95814  
[CEQA@saccounty.gov](mailto:CEQA@saccounty.gov)

Subject: Arboleda Battery Energy Storage Systems Project  
Notice of Preparation  
SCH No. 2024101395

Dear Kevin Messerschmitt:

The California Department of Fish and Wildlife (CDFW) received and reviewed the Notice of Preparation (NOP) of a draft Environmental Impact Report (EIR) from Sacramento County for the Arboleda Battery Energy Storage Systems Project (Project) pursuant to the California Environmental Quality Act (CEQA) statute and guidelines.<sup>1</sup>

Thank you for the opportunity to provide comments and recommendations regarding those activities involved in the Project that may affect California fish, wildlife, native plants, and their habitat. Likewise, we appreciate the opportunity to provide comments regarding those aspects of the Project that CDFW, by law, may need to exercise its own regulatory authority under the Fish and Game Code.

## **CDFW ROLE**

CDFW is California's Trustee Agency for fish and wildlife resources and holds those resources in trust by statute for all the people of the State (Fish & G. Code, §§ 711.7, subd. (a) & 1802; Pub. Resources Code, § 21070; CEQA Guidelines § 15386, subd. (a).) CDFW, in its trustee capacity, has jurisdiction over the conservation, protection, and management of fish, wildlife, native plants, and habitat necessary for biologically sustainable populations of those species. (Fish & G. Code, § 1802.) Similarly for purposes of CEQA, CDFW provides, 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.

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<sup>1</sup> 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.

## Arboleda Battery Energy Storage Systems Project

December 2, 2024

Page 2 of 10

CDFW may also act as a Responsible Agency under CEQA. (Pub. Resources Code, § 21069; CEQA Guidelines, § 15381.) CDFW expects that it may need to exercise regulatory authority as provided by the Fish and Game Code. As proposed, for example, the Project may be subject to CDFW's lake and streambed alteration regulatory authority. (Fish & G. Code, § 1600 et seq.) Likewise, to the extent implementation of the Project as proposed may result in "take" as defined by State law of any species protected under the California Endangered Species Act (CESA) (Fish & G. Code, § 2050 et seq.), the project proponent may seek related take authorization as provided by the Fish and Game Code.

### PROJECT DESCRIPTION SUMMARY

The Project site is located west of the intersection of Eschinger Road and West Stockton Boulevard, in unincorporated Sacramento County. The project site is situated on a portion of two privately owned parcels (Assessor Parcel Numbers 134-0220-064 and 134-0220-063) which total 203 acres. The project facility would occupy approximately 34 acres. The project proposal includes a request for a lot line adjustment to adjust the parcel boundaries such that project facility would be located on an approximately 40-acre parcel.

The Project consists of an up-to-250-megawatt (MW), 4-MW-hour (MWh) Battery Energy Storage System (BESS) facility, which means that at maximum capacity, the facility can potentially deliver up to 250 MW of power over a duration of 4 hours. In addition to the battery systems, the facility would include associated accessory structures that are described further below. The project also includes a 230-kilovolt (kV) offsite, overhead generation tie (gen-tie) line, which would interconnect at the Sacramento Municipal Utility District (SMUD) Elk Grove Substation.

The Project description should include the whole action as defined in the CEQA Guidelines section 15070 and should include appropriate detailed exhibits disclosing the Project area including temporary impacted areas such as equipment staging areas, spoils areas, adjacent infrastructure development, and access and haul roads if applicable.

### COMMENTS AND RECOMMENDATIONS

CDFW offers the comments and recommendations below to assist Sacramento County in adequately identifying and, where appropriate, mitigating the Project's significant, or potentially significant, direct and indirect impacts on fish and wildlife (biological) resources. Based on the potential for the Project to have a significant impact on biological resources, CDFW concludes that is appropriate for the Project.

CDFW is primarily concerned with the project impacts to Swainson's hawk (*Buteo swainsoni*), tricolored blackbird (*Agelaius tricolor*), and burrowing owl (*Athene cunicularia*).

#### Comment 1. California Endangered Species Act

**Issue:** CDFW is responsible for ensuring appropriate conservation of fish and wildlife resources including threatened, endangered, and/or candidate plant and animal species,

## Arboleda Battery Energy Storage Systems Project

December 2, 2024

Page 3 of 10

pursuant to CESA. CDFW recommends that a CESA Incidental Take Permit (ITP) be obtained if the Project has the potential to result in “take” (Fish & G. Code § 86 defines “take” as “hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill”) of State-listed CESA species, either through construction or over the life of the Project. State-listed species with the potential to occur in the area include, but are not limited to: Swainson’s hawk, tricolored blackbird, and burrowing owl.

The DEIR should disclose the potential of the Project to take State-listed species and how the impacts will be avoided, minimized, and mitigated. Please note that mitigation measures that are adequate to reduce impacts to a less-than significant level to meet CEQA requirements may not be enough for the issuance of an ITP. To facilitate the issuance of an ITP, if applicable, CDFW recommends the EIR include measures to minimize and fully mitigate the impacts to any State-listed species the Project has potential to take. CDFW encourages early consultation with staff to determine appropriate measures to facilitate future permitting processes and to engage with the U.S. Fish and Wildlife Service and/or National Marine Fisheries Service to coordinate specific measures since both State and federally listed species may be present within the Project vicinity.

Fish and Game Code section 3503 makes it unlawful to take, possess, or needlessly destroy the nest or eggs of any bird, except as otherwise provided by this code or any regulation made pursuant thereto. Additionally, Fish and Game Code section 3503.5 makes it unlawful to take, possess, or destroy any birds in the orders of Falconiformes or Strigiformes (birds-of-prey) or to take, possess, or destroy the nest or eggs of any such bird except as otherwise provided by this code or any regulation adopted pursuant thereto. In areas where know state listed birds of prey are known to occur and utilize annually, the issuance of an ITP can help provide regulatory compliance and establish full mitigation requirements with species protective measures. CDFW recommends the Project applicant obtain an ITP to cover all preconstruction, construction, and postconstruction activities, ensuring that any potential Project related impacts to birds of prey can demonstrate compliance with the Fish and Game Code.

### **Comment 2. Burrowing Owl CESA Candidacy**

**Issue:** On October 10, 2024, the California Fish and Game Commission granted the western burrowing owls candidate species protections under CESA. The candidacy designation temporarily affords the burrowing owl broad CESA protections (including prohibitions against “take” without permit authorization) throughout the entirety of California over the next 12-18 months while CDFW conducts a species status review to confirm whether (and where) listing is warranted and to recommend management and recovery actions. Projects with potential impacts to burrowing owl are encouraged obtain an ITP from CDFW in order to comply with CESA. In the event that CDFW does confirm listing is warranted for the burrowing owl in the future when the Project’s construction phase is set to occur and take of burrowing owl or its nest is unavoidable, then the Project proponent can obtain an ITP from CDFW and provide suitable mitigation for loss of nesting habitat.

## Arboleda Battery Energy Storage Systems Project

December 2, 2024

Page 4 of 10

**Recommendation or Recommended Mitigation Measure:** CDFW recommends the EIR include the recent CESA candidate status of the burrowing owl. Additionally, if it is determined that avoidance of burrowing owl is not feasible, then CDFW recommends the project proponent seek apply for an ITP from CDFW.

### **Comment 3. Burrowing Owl Loss of Nesting and Foraging Habitat**

**Issue:** The project site provides foraging habitat for burrowing owl. The Project is anticipated to develop 34 acres of suitable nesting and foraging habitat. Burrowing owl have suffered significant habitat loss due to large-scale development, including wind and solar energy infrastructure development, and from the killing and removal of mammals during significant grading activities whose underground burrows the owls use for nesting. Burrowing owl is listed as a candidate species under CESA and has additional protection under the Migratory Bird Treaty Act and Section 3503.5 of the Fish and Game Code; therefore, impacts may be considered potentially significant unless adequate mitigation is incorporated.

**Recommendation or Recommended Mitigation Measure:** CDFW recommends the lead agency quantify the total acreage of Project impacts to burrowing owl foraging and nesting habitat. Two seasons of temporary impacts to foraging habitat should be considered and mitigated for as permanent impacts. To reduce impacts to burrowing owl nesting and foraging habitat to a less than significant level, CDFW recommends a minimum of 3 acres for each acre habitat replacement for nesting and a minimum of acre for acre habitat replacement for foraging habitat in the form of fee title acquisition with a conservation easement to protect burrowing owl nesting and foraging habitat. To reduce impacts to a level of less than significant, CDFW recommends incorporating the following mitigation measure in the DEIR that adequately addresses impacts to burrowing owl nesting and foraging habitat:

**“To compensate for the permanent loss burrowing owl nesting and foraging habitat, the project proponent shall preserve nesting and foraging habitat for burrowing owl, or shall purchase burrowing owl habitat mitigation credits at a CDFW-approved mitigation bank, at a minimum of 3:1 for loss of nesting and 1:1 for loss foraging habitat ratios. Before purchase of credits at a mitigation bank and/or acquisition of mitigation land, the location of the mitigation shall be determined by the lead agency and a qualified biologist based on habitat suitability. This mitigation shall be implemented by the project proponent prior to starting project activities in suitable burrowing owl foraging habitat.”**

### **Comment 4. Swainson’s Hawk Loss of Nesting and Foraging Habitat**

**Issue:** The project site provides suitable nesting and foraging habitat for Swainson’s hawk. The Project is anticipated to develop 34 acres of suitable foraging habitat. The primary threat to the Swainson’s hawk population in California continues to be habitat loss, especially the loss of suitable foraging habitat, but also nesting habitat in some portions of the species’ breeding range due to urban development and incompatible agriculture. This impact may have been the greatest factor in reducing Swainson’s hawk range and abundance in California over the last century (California Department of Fish and Game 1993, California

## Arboleda Battery Energy Storage Systems Project

December 2, 2024

Page 5 of 10

Department of Conservation 2011). Swainson's hawk is listed as threatened under CESA and has additional protection under the Migratory Bird Treaty Act and section 3503.5 of the Fish and Game Code; therefore, impacts may be considered potentially significant unless adequate mitigation is incorporated.

Significant loss of Swainson's hawk nesting and foraging habitat has occurred in Yolo, Sacramento, and San Joaquin counties due to residential development, economic and resource availability factors, and conversion of riparian and woodland habitat to agriculture and unsuitable urban environments (CDFW 2016). Loss of lone Swainson's hawk nesting trees due to construction may also impact breeding Swainson's hawk through elimination or shifting of breeding territories, as many of these trees such as the one adjacent to the Project area are in proximity to suitable foraging habitat and are often utilized by Swainson's hawks. Additionally, Swainson's hawk are known to exhibit high site fidelity; a loss of an actively used nest tree could result in a reduced breeding potential for the species. If current trends of habitat conversion to incompatible land use continue, the Central Valley Swainson's hawk's population will likely continue to decline.

Suitable foraging habitat is necessary to provide an adequate energy source for breeding Swainson's hawk adults, including support of nestlings and fledglings. If prey resources are not sufficient, or if adults must hunt long distances from the nest site, the energetics of the foraging effort may result in reduced nestling health and survival with an increased likelihood of disease and/or starvation. In more extreme cases, the breeding pair, in an effort to assure their own existence, may even abandon the nest and young (Woodbridge 1985). Routine animal grazing activities, increases in human presence, and the permanent impacts associated with solar panel installation, will permanently reduce the amount of SWHA foraging habitat. SWHA generally searches for prey by soaring above fields and solar panels reduce their ability to see and catch their prey.

**Recommendation or Recommended Mitigation Measure:** CDFW recommends the lead agency quantify the total acreage of Project impacts to Swainson's hawk foraging and nesting habitat. Two seasons of temporary impacts to foraging habitat should be considered and mitigated for as permanent impacts. To reduce impacts to Swainson's hawk foraging and nesting habitat to a less than significant level, CDFW recommends a minimum of 3 acres for each acre habitat replacement for nesting and a minimum of acre for acre habitat replacement for foraging habitat in the form of fee title acquisition with a conservation easement to protect Swainson's hawk foraging and nesting habitat. To reduce impacts to a level of less than significant, CDFW recommends incorporating the following mitigation measure in the DEIR that adequately addresses impacts to Swainson's hawk nesting and foraging habitat:

**“To compensate for the permanent loss of 34 acres of Swainson's hawk nesting and foraging habitat, the project proponent shall preserve foraging habitat for Swainson's hawk or shall purchase Swainson's hawk habitat mitigation credits at a CDFW-approved mitigation bank, at a minimum of 3:1 for loss of nesting and 1:1 for loss of foraging habitat ratios. Before purchase of credits at a mitigation bank and/or acquisition of mitigation land, location of the mitigation shall be determined**

## Arboleda Battery Energy Storage Systems Project

December 2, 2024

Page 6 of 10

**by the lead agency and a qualified biologist based on habitat suitability. This mitigation shall be implemented by the project proponent prior to starting project activities in suitable Swainson's hawk foraging habitat."**

### **Comment 5: Swainson's hawk Protocol-level Surveys**

**Issue:** The Project is located within suitable foraging and nesting habitat for Swainson's hawk, a state threatened species, also protected under Fish and Game Code section 3503, 3503.5 and the federal Migratory Bird Treaty Act (MBTA). Therefore, impacts to Swainson's hawk may be considered potentially significant unless adequate mitigation is incorporated.

**Recommendation or Recommended Mitigation Measure:** CDFW recommends that a designated biologist conduct Swainson's hawk protocol-level surveys during all survey periods throughout the nesting season prior to the commencement of all construction activities, regardless of potential vegetation removal. Protocol-level surveys should be conducted within a minimum 1/2-mile radius around the project area in accordance with the *Recommended Timing and Methodology for Swainson's Hawk Nesting Surveys in California's Central Valley* (Swainson's Hawk Technical Advisory Committee, 2000) as follows:

- January to March 20- One (1) Survey, All Day
- March 20 to April 5- Three (3) Surveys, Sunrise to 1000 / 1600 to Sunset
- April 5 to April 20- Three (3) Surveys, Sunrise to 1200 / 1630 to Sunset
- April 21 to June 10- Monitoring
- June 10 to July 30- Three (3) Surveys, Sunrise to 1200 / 1600 to Sunset

Nests found within 0.50 miles should be monitored either continuously or periodically depending on the construction or maintenance activities and level of disturbance until young have fledged, are feeding independently and are no longer dependent on the nest. Additionally, CDFW recommends on-site monitoring by a designated biologist familiar with the species, as buffers may need to be increased based on the birds' tolerance level to the disturbance as activities change and as the birds' transition through different stages of the nesting cycle.

### **Comment 6. Tricolored blackbird Preconstruction Surveys and Loss of Foraging Habitat**

**Issue:** The project site is less than a mile from suitable Tricolored blackbird nesting habitat, and construction activities could result in significant impacts to nesting tricolored blackbird through loss of foraging habitat, noise, fugitive dust, human presence, and/or night lighting. Noise from road use, generators, and other equipment may disrupt tricolored

## Arboleda Battery Energy Storage Systems Project

December 2, 2024

Page 7 of 10

blackbird mating calls or songs which could impact their reproductive success (Patricelli and Blickley 2006, Halfwerk et al. 2011). Bayne et al. (2008) found that songbird abundance and density was significantly reduced in areas with high levels of noise.

**Recommendation or Recommended Mitigation Measure:** CDFW recommends Sacramento County quantify the total acreage of Project impacts to tricolored blackbird foraging habitat. Two seasons of temporary impacts to foraging habitat should be considered and mitigated for as permanent impacts. To reduce impacts to tricolored blackbird foraging habitat to a less than significant level, CDFW recommends a minimum of acre for acre habitat replacement in the form of fee title acquisition with a conservation easement to protect tricolored blackbird foraging habitat. To reduce impacts to a level of less than significant, CDFW recommends incorporating the following mitigation measures in the EIR that adequately addresses impacts to tricolored blackbird foraging habitat:

**“Prior to initiation of construction in all project work areas and within a ¼-mile of project work areas, a qualified biologist shall conduct protocol-level surveys to evaluate the presence of tricolored blackbird breeding colonies, suitable nesting and foraging habitat. Surveys shall be conducted during the nesting season (March 15 to July 31). If construction is initiated in the project work area during the nesting season, three (3) surveys shall be conducted within fifteen (15) days prior to the construction activity, with one of the surveys within three (3) days prior to the start of the construction. The surveys shall be based on survey methods identified in the Results of the 2017 Tricolored Blackbird Statewide Survey, Appendix 1 (Meese 2017). If breeding colonies are found, the foraging behavior of the colony shall also be documented. Many tricolored blackbird breeding colonies expand over time as additional birds are recruited at the edges of established colonies. For this reason, it is important to reassess the extent of a breeding colony before the start of construction activities. If tricolored blackbird are found, no work shall begin until CDFW has been consulted and compliance with CESA can be demonstrated.**

**To compensate for the permanent loss of 34 acres of tricolored blackbird foraging habitat, the project proponent shall preserve foraging habitat for tricolored blackbird, or shall purchase tricolored blackbird foraging habitat mitigation credits at a CDFW-approved mitigation bank, at a minimum 1:1 ratio. Before purchase of credits at a mitigation bank and/or acquisition of mitigation land, location of the mitigation shall be determined by the lead agency and a qualified biologist based on habitat suitability. This mitigation shall be implemented by the project proponent prior to starting project activities in suitable tricolored blackbird foraging habitat.”**

## Arboleda Battery Energy Storage Systems Project

December 2, 2024

Page 8 of 10

### Comment 7. Pollinators

**Issue:** The environmental document does not include measures to increase use by pollinators such as dual use farming. The Project should be designed to optimize a balance between electrical generation and agricultural production (Jossi 2018) or native plants. Native plantings or dual use farming techniques provide additional foraging resources for pollinator species including but not limited to Crotch's bumblebee (*Bombus crotchii*), a CESA candidate species, and for other native species by increasing the amount of nectar resources on a local level. Incorporating locally native plantings or dual use farming techniques help to increase pollinator populations and would help to reduce project impacts to a less than significant level.

**Recommendation or Recommended Mitigation Measure:** CDFW recommends the Project be planted with deep-rooted native flowers and grasses that capture and filter storm water, build topsoil, and provide abundant and healthy food for bees and other insects that provide critical services to our food and agricultural systems as described on the Fresh Energy website at <https://fresh-energy.org/beeslovesolar/>.

### 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 California Natural Diversity Database (CNDDDB). The CNDDDB field survey form can be found at the following link: <https://www.wildlife.ca.gov/Data/CNDDDB/Submitting-Data>. The completed form can be submitted online or mailed electronically to CNDDDB at the following email address: [CNDDDB@wildlife.ca.gov](mailto:CNDDDB@wildlife.ca.gov).

### FILING FEES

The Project, as proposed, would have an impact on fish and/or wildlife, and assessment of filing fees is necessary. Fees are payable upon filing of the Notice of Determination by the Lead Agency and serve to help defray the cost of environmental review by CDFW. Payment of the fee is required in order for the underlying project approval to be operative, vested, and final. (Cal. Code Regs, tit. 14, § 753.5; Fish & G. Code, § 711.4; Pub. Resources Code, § 21089.)

### CONCLUSION

Pursuant to Public Resources Code § 21092 and § 21092.2, CDFW requests written notification of proposed actions and pending decisions regarding the proposed project. Written notifications shall be directed to: California Department of Fish and Wildlife North Central Region, 1701 Nimbus Road, Rancho Cordova, CA 95670 or emailed to [R2CEQA@wildlife.ca.gov](mailto:R2CEQA@wildlife.ca.gov).




Arboleda Battery Energy Storage Systems Project

December 2, 2024

Page 9 of 10

CDFW appreciates the opportunity to comment on the NOP for the Arboleda Battery Energy Storage Systems Project to assist Sacramento County in identifying and mitigating Project impacts on biological resources. CDFW personnel are available for consultation regarding biological resources and strategies to minimize and/or mitigate impacts. Questions regarding this letter or further coordination should be directed to Michael Shun, Senior Environmental Scientist (Specialist) at (916) 767-8444 or [Michael.shun@wildlife.ca.gov](mailto:Michael.shun@wildlife.ca.gov).

Sincerely,

DocuSigned by:  
  
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Tanya Sheya  
Environmental Program Manager

ec: Dylan Wood, Senior Environmental Scientist (Supervisory)  
Michael Shun, Senior Environmental Scientist (Specialist)  
*Department of Fish and Wildlife*

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Arboleda Battery Energy Storage Systems Project

December 2, 2024

Page 10 of 10

**REFERENCES**

Bayne, E. M., L. Habib, and S. Boutin. 2008. Impacts of chronic anthropogenic noise from energy-sector activity on abundance of songbirds in the boreal forest. *Conservation Biology* 22:1186–1193.

California Department of Conservation Agricultural Land Mapping. 2010.  
[http://www.conservation.ca.gov/dlrp/Pages/gh\\_maps.aspx](http://www.conservation.ca.gov/dlrp/Pages/gh_maps.aspx)

California Department of Fish and Game (CDFG). 1993. 5-year Status Review: Swainson's hawk (*Buteo swainsoni*). Prepared for the California Fish and Game Commission. Nongame Bird and Mammal Program 1416 Ninth Street, Sacramento, CA

California Department of Fish and Wildlife. 2016. Status Review: Swainson's Hawk (*Buteo swainsoni*) in California. Five-year Status Report, received by the Fish and Game Commission April 14, 2016.  
[http://www.fgc.ca.gov/meetings/2016/Apr/FGC/exhibits/SS\\_0414\\_Item\\_21\\_SwainsonsHawk.pdf](http://www.fgc.ca.gov/meetings/2016/Apr/FGC/exhibits/SS_0414_Item_21_SwainsonsHawk.pdf)

Halfwerk, W., L. J. M. Holleman, Ck. M. Lessells, and H. Slabbekoorn. 2011. Negative impact of traffic noise on avian reproductive success. *Journal of Applied Ecology* 48:210–219.

Jossi, Frank. 2008. *Scientific American*. Solar Farms Produce Power—and Food. Retrieved on May 21, 2020

Patricelli, G., and J. J. L. Blickley. 2006. Avian communication in urban noise: causes and consequences of vocal adjustment. *Auk* 123:639–649.

Woodbridge, B. 1985. Biology and management of Swainson's hawk in the Butte Valley, California. U.S. Forest Service Report, 19 pp.