



State of California – Natural Resources Agency  
DEPARTMENT OF FISH AND WILDLIFE  
Central Region  
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GAVIN NEWSOM, Governor  
CHARLTON H. BONHAM, Director



Governor's Office of Planning & Research

**FEB 06 2020**

February 5, 2020

## STATE CLEARINGHOUSE

Christy Hopper, Planning Services Manager  
City of Marina  
211 Hillcrest Avenue  
Monterey, California 93933

**Subject: Joby Aviation Manufacturing Facility (Project)  
Mitigated Negative Declaration (MND)  
SCH No: 2020010127**

Dear Ms. Hopper:

The California Department of Fish and Wildlife (CDFW) received the MND from the City of Marina for the above-referenced Project pursuant to the California Environmental Quality Act (CEQA) and CEQA 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 and wildlife. Likewise, CDFW appreciates the opportunity to provide comments regarding those aspects of the Project that CDFW, by law, may be required to carry out or approve through the exercise of its own regulatory authority under 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 (*Id.*, § 1802). Similarly, for purposes of CEQA, CDFW is charged by law to provide, as available, biological expertise during public

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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.

agency environmental review efforts, focusing specifically on projects and related activities that have the potential to adversely affect fish and wildlife resources. CDFW is also submitting comments as a **Responsible Agency** under CEQA (Pub. Resources Code, § 21069; CEQA Guidelines, § 15381). CDFW expects that it may need to exercise regulatory authority as provided by the Fish and Game Code. As proposed, for example, the Project may be subject to CDFW's lake and streambed alteration regulatory authority (Fish & G. Code, § 1600 et seq.). Likewise, to the extent implementation of the Project as proposed may result in "take" as defined by State law of any species protected under the California Endangered Species Act (CESA) (Fish & G. Code, § 2050 et seq.), related authorization as provided by the Fish and Game Code will be required.

**Water Pollution:** Pursuant to Fish and Game Code section 5650, it is unlawful to deposit in, permit to pass into, or place where it can pass into "Waters of the State" any substance or material deleterious to fish, plant life, or bird life, including non-native species. It is possible that without appropriate mitigation measures, implementation of the Project could result in pollution of Waters of the State from storm water runoff or construction-related erosion. Potential impacts to the wildlife resources that utilize these watercourses include the following: increased sediment input from road or structure runoff; toxic runoff associated with development activities and implementation; and/or impairment of wildlife movement along riparian corridors. The Regional Water Quality Control Board and U.S. Army Corps of Engineers also have jurisdiction regarding discharge and pollution to Waters of the State.

**Nesting Birds:** CDFW has jurisdiction over actions with potential to result in the disturbance or destruction of active nest sites or the unauthorized take of birds. Fish and Game Code sections that protect birds, their eggs and nests include sections 3503 (regarding unlawful take, possession or needless destruction of the nest or eggs of any bird), 3503.5 (regarding the take, possession or destruction of any birds-of-prey or their nests or eggs), and 3513 (regarding unlawful take of any migratory nongame bird).

In this role, CDFW is responsible for providing, as available, biological expertise during public agency environmental review efforts (e.g., CEQA), focusing specifically on Project activities that have the potential to adversely affect fish and wildlife resources. CDFW provides recommendations to identify potential impacts and possible measures to avoid or reduce those impacts.

## **PROJECT DESCRIPTION SUMMARY**

**Proponent:** City of Marina

**Objective:** The Project proposes the construction of a new 580,000-square foot single story steel manufacturing building which would be used for the production of lightweight,

all-electric, vertical take-off and landing aircrafts. The overall building would consist of approximately 580,000 square feet; however, it is anticipated to be constructed in two phases, of approximately 290,000 square feet per phase, with the second phase being completed approximately three to five years after the first phase is operational. The project would be constructed on approximately 25.7 acres within the eastern portion of the Airport on a relatively flat area that consists of approximately 23.2 acres of two- to 10-inch thick concrete tarmac and approximately 2.5 acres of disturbed ruderal and white-tip clover swale vegetation.

**Location:** Marina Municipal Airport in Marina, California. The site is bounded to the west by airport hangars, aircraft parking aprons and taxiways, office space, a fire station, parking lots, Imjin Road, and open space/habitat preserve; to the south by open space that is planned to be developed as the central north campus of the University of California Monterey Bay Education, Science and Technology (UC MBEST) Center and Reservation Road; to the north by runways, taxiways aircraft parking aprons, and open space/habitat preserve; and to the east by an additional aircraft parking apron and taxiways, open space that is planned for development as the Airport Business Park, and Blanco Road.

**Timeframe:** Approximately over a period of 15 months to 5 years.

## COMMENTS AND RECOMMENDATIONS

CDFW offers the following comments and recommendations to assist the City of Marina in adequately identifying and/or mitigating the Project's significant, or potentially significant, direct and indirect impacts on fish and wildlife (biological) resources. Editorial comments or other suggestions may also be included to improve the document.

There are many special-status resources present adjacent to the Project area that these resources may need to be evaluated and addressed prior to any approvals that would allow ground-disturbing activities. CDFW is concerned regarding potential impacts to special-status species including, but not limited to, the State threatened, federally endangered, and California Rare Plant Ranked (CRPR) 1B.2 Monterey gilia (*Gilia tenuiflora* ssp. *arenaria*), the State endangered and CRPR 1B.1 seaside bird's-beak (*Cordylanthus rigidus* ssp. *littoralis*), the federally threatened and CRPR 1B.2 Monterey spineflower (*Chorizanthe pungens* var. *pungens*), the CRPR 1B.1 Yadon's rein orchid (*Piperia yadonii*), the following CRPR 1B.2 plants, sandmat manzanita (*Arctostaphylos pumila*), marsh microseris (*Microseris paludosa*), and northern curly-leaved monardella (*Monardella sinuata* ssp. *nigrescens*), and the State species of special concern burrowing owl (*Athene cunicularia*).

## **I. Environmental Setting and Related Impact**

**Would the Project have a substantial adverse 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 the United States Fish and Wildlife Service (USFWS)?**

### **COMMENT 1: Monterey gilia and Seaside bird's-beak**

**Issue:** Monterey gilia, Monterey spineflower, and seaside bird's-beak are known to occur on, directly adjacent to, and within the Project site vicinity (USFWS 2008, CDFW 2020). Lands designated for development that were transferred from the Department of the Army's former Fort Ord, as is the case with the Project site, contain high quality habitat for the CESA-listed Monterey gilia (USFWS 2008). In addition, the sandy soils and Maritime Chaparral vegetation community present onsite are suitable to support CESA-listed seaside bird's-beak (CDFW 2018, CNPS 2020, UC Davis 2020). Therefore, grading and development associated with the Project have the potential to directly and indirectly impact the species mentioned above.

**Specific impact:** Without appropriate avoidance and minimization measures potential impacts to special-status plant species include inability to reproduce and direct mortality. Unauthorized take of species listed as threatened, endangered, or rare pursuant to CESA or the Native Plant Protection Act is a violation of Fish and Game Code.

**Evidence impact would be significant:** Monterey gilia, seaside bird's-beak, Monterey spineflower, and many of the CRPR plant species listed above are narrowly distributed endemic species. These species are threatened with habitat loss and habitat fragmentation resulting from development, vehicle and foot traffic, and introduction of non-native plant species (CNPS 2020). Therefore, impacts of the Project have the potential to significantly impact populations of the species mentioned above.

### **Recommended Potentially Feasible Mitigation Measure(s)**

To evaluate potential impacts to special-status plants, CDFW recommends conducting the following evaluation of the Project site, incorporating the following mitigation measures into the CEQA document prepared for this Project, and that these measures be made conditions of approval for the Project.



### **Recommended Mitigation Measure 1: Focused Surveys**

CDFW recommends that the Project area be surveyed for special-status plants by a qualified botanist following the "Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Sensitive Natural Communities" (CDFW 2018). This protocol, which is intended to maximize detectability, includes identification of reference populations to facilitate the likelihood of field investigations occurring during the appropriate floristic period. In the absence of protocol-level surveys being performed, additional surveys may be necessary.

### **Recommended Mitigation Measure 2: Special-Status Plant Avoidance**

CDFW recommends special-status plant species be avoided whenever possible by delineation and observing a no-disturbance buffer of at least 50 feet from the outer edge of the plant population(s) or specific habitat type(s) required by special-status plant species. If buffers cannot be maintained, then consultation with CDFW is warranted to determine appropriate minimization and mitigation measures for impacts to special-status plant species.

### **Recommended Mitigation Measure 3: Special-Status Plant Take Authorization**

If a State-listed plant species is identified during botanical surveys, consultation with CDFW is warranted to determine if the Project can avoid take. If take cannot be avoided, take authorization through issuance of an Incidental Take Permit (ITP) by CDFW is necessary to comply with Fish and Game Code.

### **COMMENT 2: Burrowing Owl (BUOW)**

**Issue:** BUOW may occur within and/or adjacent to the Project site. BUOW inhabit open grassland containing small mammal burrows, a requisite habitat feature used by BUOW for nesting and cover. Habitat both within and bordering the Project site, supports grassland habitat (CDFW 2020).

**Specific impact:** Potentially significant direct impacts associated with subsequent activities and development include burrow collapse, inadvertent entrapment, nest abandonment, reduced reproductive success, reduction in health and vigor of eggs and/or young, and direct mortality of individuals.

**Evidence impact is potentially significant:** BUOW rely on burrow habitat year-round for their survival and reproduction. Habitat loss and degradation are considered the greatest threats to BUOW in California's Central Valley (Gervais et al. 2008). The Project site contains and is bordered by some of the only remaining undeveloped land in the vicinity. Therefore, subsequent ground-disturbing activities associated with Project approval have the potential to significantly impact local

BUOW populations. In addition, and as described in CDFW's "Staff Report on Burrowing Owl Mitigation" (CDFG 2012), excluding and/or evicting BUOW from their burrows is considered a potentially significant impact under CEQA.

#### **Recommended Potentially Feasible Mitigation Measure(s) (Regarding Environmental Setting and Related Impact)**

To evaluate potential impacts to BUOW, CDFW recommends conducting the following evaluation of the Project site, incorporating the following mitigation measures into the CEQA document prepared for this Project, and that these measures be made conditions of approval for the Project.

#### **Recommended Mitigation Measure 4: BUOW Surveys**

CDFW recommends assessing presence/absence of BUOW by having a qualified biologist conduct surveys following the California Burrowing Owl Consortium's "Burrowing Owl Survey Protocol and Mitigation Guidelines" (CBOC 1993) and CDFW's "Staff Report on Burrowing Owl Mitigation" (CDFG 2012). Specifically, CBOC and CDFW's Staff Report suggest three or more surveillance surveys conducted during daylight with each visit occurring at least three weeks apart during the peak breeding season (April 15 to July 15), when BUOW are most detectable.

#### **Recommended Mitigation Measure 5: BUOW Avoidance**

CDFW recommends no-disturbance buffers, as outlined in the "Staff Report on Burrowing Owl Mitigation" (CDFG 2012), be implemented prior to and during any ground-disturbing activities. Specifically, CDFW's Staff Report recommends that impacts to occupied burrows be avoided in accordance with the following table unless a qualified biologist approved by CDFW verifies through non-invasive methods that either: 1) the birds have not begun egg laying and incubation; or 2) that juveniles from the occupied burrows are foraging independently and are capable of independent survival.

Location	Time of Year	Level of Disturbance		
		Low	Med	High
Nesting sites	April 1-Aug 15	200 m*	500 m	500 m
Nesting sites	Aug 16-Oct 15	200 m	200 m	500 m
Nesting sites	Oct 16-Mar 31	50 m	100 m	500 m

\* meters (m)

## II. Editorial Comments and/or Suggestions

**Lake and Streambed Alteration (LSA):** A swale, designated as white-tip clover swale vegetation in Figure 4 of the MND, is present within the Project site. Ground-disturbing activities that have the potential to change the bed, bank, and channel of water courses, or alter riparian habitat, may be subject to CDFW's regulatory authority pursuant Fish and Game Code section 1600 et seq. Fish and Game Code section 1600 et seq. requires an entity to notify CDFW prior to commencing any activity that may (a) substantially divert or obstruct the natural flow of any river, stream, or lake; (b) substantially change or use any material from the bed, bank, or channel of any river, stream, or lake (including the removal of riparian vegetation); or (c) deposit debris, waste or other materials that could pass into any river, stream, or lake. "Any river, stream, or lake" includes those that are ephemeral or intermittent as well as those that are perennial. CDFW is required to comply with CEQA in the issuance of a Lake or Streambed Alteration Agreement. For additional information on notification requirements, please contact our staff in the LSA Program at (559) 243-4593.

**Nesting birds:** CDFW encourages that Project implementation occur during the bird non-nesting season; however, if ground-disturbing or vegetation-disturbing activities must occur during the breeding season (February through mid-September), the Project applicant is responsible for ensuring that implementation of the Project does not result in violation of the Migratory Bird Treaty Act or relevant Fish and Game Codes as referenced above.

To evaluate Project-related impacts on nesting birds, CDFW recommends that a qualified wildlife biologist conduct pre-activity surveys for active nests no more than 10 days prior to the start of ground or vegetation disturbance to maximize the probability that nests that could potentially be impacted are detected. CDFW also recommends that surveys cover a sufficient area around the Project site to identify nests and determine their status. A sufficient area means any area potentially affected by the Project. In addition to direct impacts (i.e. nest destruction), noise, vibration, and movement of workers or equipment could also affect nests. Prior to initiation of construction activities, CDFW recommends that a qualified biologist conduct a survey to establish a behavioral baseline of all identified nests. Once construction begins, CDFW recommends having a qualified biologist continuously monitor nests to detect behavioral changes resulting from the Project. If behavioral changes occur, CDFW recommends halting the work causing that change and consulting with CDFW for additional avoidance and minimization measures.

If continuous monitoring of identified nests by a qualified wildlife biologist is not feasible, CDFW recommends a minimum no-disturbance buffer of 250 feet around active nests of non-listed bird species and a 500-foot no-disturbance buffer around active nests of non-listed raptors. These buffers are advised to remain in place until the breeding



season has ended or until a qualified biologist has determined that the birds have fledged and are no longer reliant upon the nest or on-site parental care for survival. Variance from these no-disturbance buffers is possible when there is compelling biological or ecological reason to do so, such as when the construction area would be concealed from a nest site by topography. CDFW recommends that a qualified wildlife biologist advise and support any variance from these buffers and notify CDFW in advance of implementing a variance.

**Federally Listed Species:** CDFW recommends consulting with the USFWS on potential impacts to federally listed species including, but not limited to, Monterey gilia and Monterey spineflower. Take under the Federal Endangered Species Act (FESA) is more broadly defined than CESA; take under FESA also includes significant habitat modification or degradation that could result in death or injury to a listed species by interfering with essential behavioral patterns such as breeding, foraging, or nesting. Consultation with the USFWS in order to comply with FESA is advised well in advance of any ground disturbing activities.

## 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 mailed electronically to CNDDDB at the following email address: [CNDDDB@wildlife.ca.gov](mailto:CNDDDB@wildlife.ca.gov). The types of information reported to CNDDDB can be found at the following link: <https://www.wildlife.ca.gov/Data/CNDDDB/Plants-and-Animals>.

## FILING FEES

If it is determined that the Project has the potential to impact biological resources, an assessment of filing fees will be 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 & Game Code, § 711.4; Pub. Resources Code, § 21089).

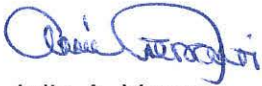



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CDFW appreciates the opportunity to comment on the Project to assist the City of Marina in identifying and mitigating the Project's impacts on biological resources.

More information on survey and monitoring protocols for sensitive species can be found at CDFW's website (<https://www.wildlife.ca.gov/Conservation/Survey-Protocols>). If you have any questions, please contact Jim Vang, Environmental Scientist, at the address provided on this letterhead, by telephone at (559) 243-4014 extension 254, or by electronic mail at [Jim.Vang@wildlife.ca.gov](mailto:Jim.Vang@wildlife.ca.gov).

Sincerely,



 Julie A. Vance  
Regional Manager

Attachment

cc: United States Fish and Wildlife Service  
2800 Cottage Way, Suite W-2605  
Sacramento, California 95825

United States Army Corps of Engineers  
San Joaquin Valley Office  
1325 "J" Street, Suite #1350  
Sacramento, California 95814-2928

Regional Water Quality Control Board  
Central Coast Region  
895 Aerovista Place, Suite 101  
San Luis Obispo, California 93401

ec: Jeff Cann  
Linda Connolly  
California Department of Fish and Wildlife

### Literature Cited

- California Burrowing Owl Consortium (CBOC). 1993. Burrowing owl survey protocol and mitigation guidelines. April 1993.
- California Department of Fish and Game. 2012. Staff Report on Burrowing Owl Mitigation. California Department of Fish and Game, March 7, 2012.
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- CDFW. 2020. Biogeographic Information and Observation System (BIOS). <https://www.wildlife.ca.gov/Data/BIOS>. Accessed 31 January 2020.
- California Native Plant Society, Rare Plant Program (CNPS). 2020. Inventory of Rare and Endangered Plants of California (online edition, v8-03 0.39). Website <http://www.rareplants.cnps.org>. Accessed 31 January 2020.
- Gervais, J.A., D.D. Rosenberg, and L.A. Comrack. Burrowing Owl (*Athene cunicularia*) in Shuford, W.D. and T. Gardali, editors. 2008. California Bird Species of Special Concern: A ranked assessment of species, subspecies, and distinct populations of birds of immediate conservation concern in California. Studies of Western Birds 1. Western Field Ornithologists, Camarillo, California, and California Department of Fish and Game, Sacramento, California, USA.
- University of California, Davis (UC Davis), 2020. California Soil Resources Lab. <https://casoilresource.lawr.ucdavis.edu/>. Accessed 31 January 2020.
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**Attachment 1**

**CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE  
RECOMMENDED MITIGATION MONITORING AND REPORTING PROGRAM  
(MMRP)**

**PROJECT: Joby Aviation Manufacturing Facility**

**SCH No.: 2020010127**

<b>RECOMMENDED MITIGATION MEASURE</b>	<b>STATUS/DATE/INITIALS</b>
<i>Before Disturbing Soil or Vegetation</i>	
Recommended Mitigation Measure 1: Focused Surveys	
Recommended Mitigation Measure 2: Special-Status Plant Avoidance	
Recommended Mitigation Measure 3: Special-Status Plant Take Authorization	
Recommended Mitigation Measure 4: BUOW Surveys	
Recommended Mitigation Measure 5: BUOW Avoidance	
<i>During Construction</i>	
Recommended Mitigation Measure 2: Special-Status Plant Avoidance	
Recommended Mitigation Measure 5: BUOW Avoidance	