



STATE OF CALIFORNIA
DEPARTMENT OF FISH AND WILDLIFE

GAVIN NEWSOM, Governor
MEGHAN HERTEL, Director

Central Region
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Fresno, California 93710
(559) 243-4005
wildlife.ca.gov

September 8, 2026

Jeremy Shaw, Planner
Development Services and Capital Projects Division
Fresno County Department of Public Works and Planning
2220 Tulare Street, Sixth Floor
Fresno, California 93721
(559) 600-4207
jshaw@fresnocountyca.gov

**Subject: Initial Study (IS) No. 8210 and Unclassified Conditional Use Permit No. 3738 Ext 2 (Project)
Project Review Consultation Notice (CON)
State Clearinghouse No. 2023040497**

Dear Jeremy Shaw:

The California Department of Fish and Wildlife (CDFW) received an Early Consultation request from Fresno County (County) for the above-referenced Project pursuant to the California Environmental Quality Act (CEQA) and CEQA Guidelines.¹

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.

The Project site is located in the City of Kerman at 24387 West Whitesbridge Avenue (APN 015-100-20S). The San Joaquin River is approximately 2.5 miles north of the proposed Project site. The CDFW owned Kerman Ecological Reserve is approximately 1.4 miles to the northeast, and the CDFW owned Alkali Sink Ecological Reserve is located approximately 2.3 miles to the southwest. The Project is proposing to amend Unclassified CUP (U-CUP) Application No. 3738 to allow an approximately 40-acre solar

¹ 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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field to power the approved hydrogen generation facility on a 324.5-acre parcel in the AE-20 (Exclusive Agricultural, 20-acre minimum parcel size) Zone District.

According to the CON, the County recently received a revised Unclassified Conditional Use Permit (U-CUP) application for the Project. The County had previously received an application for revision to the same U-CUP in April 2022. CDFW submitted a comment letter (CON Comment Letter; Attachment 1) to Fresno County on April 29, 2022, in response to the April 2022 U-CUP. The County also circulated a Mitigated Negative Declaration (MND) that was adopted on June 22, 2023. Based on the information provided in the recent revised U-CUP, CDFW recommends circulation of a revised/subsequent MND because the Project may have additional impacts due to the change in protected status for two special-status wildlife species.

Since the issuance of the MND and the CON Comment Letter issued by CDFW, three previously special-status species, specifically the State candidate western burrowing owl (*Athene cunicularia hypugaea*), the State candidate and federally proposed threatened western spadefoot (*Spea hammondi*), and the State candidate Crotch's bumble bee (*Bombus crotchii*) have been proposed for listing per the California Endangered Species Act (CESA) (Fish & G. Code, §§ 2074.2 & 2085). CDFW also has concerns over the MND's ability to mitigate impacts for American badger (*Taxidea taxus*). Please refer to the previous CON Comment Letter with the original Recommended Mitigation Monitoring and Reporting Program (Attachment 1) and the additional comments and recommendations below. These documents provide additional guidance and measures to implement to adequately identify and/or mitigate the Project's potential impacts on biological resources. An updated Recommended Mitigation Monitoring and Reporting Program (Attachment 2) has been attached with updates reflecting current regulatory requirements and species protections under CESA.

COMMENTS AND RECOMMENDATIONS

Lake and Streambed Alteration Agreement

This Project may be subject to CDFW's regulatory authority pursuant to Fish and Game Code section 1600 et seq. Aerial imagery of the Project site shows high agricultural use, but ephemeral streams may flow through the Project site during construction. Fish and Game Code section 1602 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; 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 heavily modified or are ephemeral or intermittent, like those shown in the aerial imagery, as well as those that are perennial in nature.

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CDFW is required to comply with CEQA in the issuance of a Lake or Streambed Alteration (LSA) Agreement; therefore, if the CEQA document approved for any future tiered project does not adequately describe said project and its impacts to lakes or streams, a subsequent CEQA analysis may be necessary for LSA Agreement issuance. For information on notification requirements, please refer to CDFW's website (<https://wildlife.ca.gov/Conservation/LSA>) or contact CDFW staff in the Central Region Lake and Streambed Alteration Program at (559) 243-4593.

Wildlife Fencing

The project will be fenced by 6-foot-tall privacy fencing that will surround the solar field as depicted in the project rendering and site plan. Unless specifically designed to be permeable to wildlife, placement of fencing around Project boundaries can impact wildlife passage and the ability of species, such as the State threatened and federally endangered San Joaquin kit fox (*Vulpes macrotis mutica*) and the species of special concern American badger, to pass through the Project Area. To facilitate wildlife movement and permeability through the Project site, CDFW recommends that perimeter fencing be designed to allow for passage of small and medium-sized wildlife, while impeding the passage of larger predators such as coyotes (*Canis latrans*). Perimeter fencing should be installed with a four (4) to six (6) inch gap from the bottom of the fencing material and have a smooth edge to allow permeability for wildlife. Perimeter fencing should have this gap installed continuously along the bottom of all perimeter fencing.

American Badger

The Project site is within the known geographic range of American badger (AMBA) and a historical occurrence has been documented approximately 1.5 miles of the Project site (CDFW 2026). AMBA occupies sparsely vegetated land cover with dry, friable soils to excavate dens, which they use for cover, and that support fossorial rodent prey populations (i.e., ground squirrels, pocket gophers, etc.) (Zeiner et al. 1990). Based on aerial imagery and the information provided in the NOP, most of the Project site contains suitable habitat for AMBA denning and foraging. As AMBA has the potential to den and/or forage within the Project site, CDFW recommends that a qualified biologist assess the presence/absence of AMBA by conducting a focused field survey in all areas of potentially suitable habitat as part of the biological studies conducted in support of the MND. If surveys indicate the presence or potential presence of AMBA, consultation with the CDFW is recommended for guidance on mitigation measures such as avoidance, minimization, and mitigation.

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Recommended Mitigation Measure 1: AMBA Pre-construction Surveys

CDFW recommends that a qualified biologist conduct focused surveys for AMBA, as well as their requisite habitat features, to evaluate potential impacts resulting from ground disturbance.

Recommended Mitigation Measure 2: AMBA Avoidance Buffer

Avoidance whenever possible is encouraged via delineation and a 50-foot no disturbance buffer around burrows. CDFW also advises that any individuals observed be allowed to leave the Project site of their own volition.

Western Burrowing Owl

Since the MND and the CON Comment Letter were issued, the California Fish and Game Commission (FGC) approved western burrowing owl (BUOW) as a candidate for listing under CESA on October 10, 2024, and published these findings in the California Regulatory Notice Register (Notice Register) on October 25, 2024. As such, BUOW is now a candidate under CESA and receives the same legal protection afforded to an endangered or threatened species (Fish & G. Code, §§ 2074.2 & 2085).

BUOW are known to utilize agricultural areas and have been documented breeding and foraging along canal banks and roadways within agricultural settings, and all these features are present within the Project site. The Project site is within the known geographic range of BUOW and BUOW have been observed approximately 3.0-miles to the east of the proposed Project site previously (CDFW 2026). Due to this and the change in status, CDFW revises the CON Comment Letter Recommended Mitigation Measures to the included following measures:

Recommended Mitigation Measure 3: BUOW Pre-construction Surveys

CDFW recommends that focused surveys, following the 2012 Staff Report on Burrowing Owl Mitigation (CDFG 2012), be conducted the survey season immediately prior to construction. Please note that the 2012 Staff Report necessitates multiple surveys prior to the initiation of construction.

Recommended Mitigation Measure 4: BUOW Avoidance Buffer

Should a BUOW or known BUOW den (active or inactive) be detected, either during pre-construction surveys or construction activities, CDFW recommends that no-disturbance buffers, as outlined in the 2012 Staff Report on Burrowing Owl Mitigation (CDFG 2012), be implemented prior to and during any ground disturbing activities. CDFW also recommends that these buffers be implemented

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for both wintering and breeding BUOW.

Recommended Mitigation Measure 5: BUOW Take Authorization

If a BUOW or known BUOW burrow (active or inactive) is detected, and the no-disturbance buffers outlined in the 2012 Staff Report on Burrowing Owl Mitigation are not feasible, consultation with CDFW is warranted to discuss how to implement the Project and avoid take. If take cannot be avoided, take authorization through issuance of an ITP, pursuant to Fish and Game Code section 2081 subdivision (b) is necessary to comply with CESA.

Western Spadefoot

Since the MND and the CON Comment Letter were issued, the California Fish and Game Commission (FGC) approved western spadefoot (WESP) as a candidate for potential listing as a protected species under CESA on August 13, 2026. FGC is currently working to publish these findings in the California Regulatory Notice Register (Notice Register). Once these findings are published in the Notice Register, WESP will be designated as a candidate under CESA and as such will receive the same legal protection afforded to an endangered or threatened species (Fish & G. Code, §§ 2074.2 & 2085). If WESP is found during biological surveys that are conducted as part of a project that is tiered from this Plan, and avoidance is not feasible, take authorization through the acquisition of an Incidental Take Permit (ITP), pursuant to Fish and Game Code section 2081, subdivision (b), would be necessary to comply with CESA.

The Project site is within the known geographic range of WESP, and several occurrences have been documented within three miles of the project and they are known to occupy the ecological reserves in the vicinity of the Project site, (CDFW 2026). WESP occurs primarily in grasslands, seasonal wetlands, vernal features (e.g., alkali playas), agricultural sumps, and seasonally flooded areas with appropriate upland habitat. Based on aerial imagery, there appear to be a large number of seasonal wetlands, vernal pools, and streams within the Project site and vicinity.

CDFW recommends that a habitat assessment and focused surveys be conducted as part of the biological technical studies conducted in support of the CEQA document prepared for the Project. It is recommended that surveys be conducted in coordination with CDFW to assist with determining appropriate survey methodologies to determine the presence or potential presence of WESP. CDFW also recommends the CEQA document include the following measures:

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Recommended Mitigation Measure 6: WESP Pre-construction Survey

Prior to the start of work, CDFW recommends that a qualified biologist conduct focused surveys for WESP, using appropriate survey methodologies, prior to any ground-disturbing activities that may occur as part of the Project.

Recommended Mitigation Measure 7: WESP Avoidance Buffer

If burrows, cracks, loose soil, soft soil areas immediately adjacent to water features, or other refugia are found to be used by WESP during focused surveys, avoidance whenever possible is encouraged via delineation and observance of a 50-foot no-disturbance buffer around the outermost edge of these habitats. If the species is observed on the Project site, Project activities in the immediate vicinity should cease, allowing individuals to leave the Project site on their own accord.

Recommended Mitigation Measure 8: WESP Take Authorization

Please note that implementation of the WESP measures in the Initial Study would help minimize impacts to WESP as required by CEQA but would not fully avoid impacts and thus additional measures would be needed to avoid take of WESP. CDFW recommends early consultation to help identify if avoidance is feasible or if not and to initiate discussions regarding the need for an ITP, pursuant to Fish and Game Code section 2081 subdivision (b), to comply with CESA.

Crotch's Bumble Bee

The Project site is within the known geographic range of the State candidate Crotch's bumble bee (CBB). CBB inhabits a variety of habitats, including grasslands, scrublands, openings in woodlands, and areas with bare ground such as vacant lots, dirt roads, and levees (Xerces Society et al. 2018). CBB uses requisite habitat elements for nesting, such as small mammal burrows and bunch/thatched grasses, which may be present in or near the Project site. The Initial Study describes that CBB may be present within the Project site but was not expected to be impacted by Project activities due to lack of potentially suitable nesting and foraging habitat in Project impact areas. However, CBB may forage on plants commonly found along roadsides in the Project vicinity and suitable nesting habitat may be found in the Project site.

Recommended Mitigation Measure 9: CBB Pre-construction Surveys

CDFW recommends a qualified biologist conduct focused surveys for CBB and their requisite habitat features within and adjacent to the Project site following the methodology outlined in the Survey Considerations for California Endangered

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Species Act Candidate Bumble Bee Species (CDFW 2023), during the blooming period immediately prior to Project initiation.

Recommended Mitigation Measure 10: CBB Avoidance Buffer

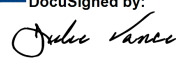
If CBB is detected, CDFW recommends that all small mammal burrows and thatched/bunch grasses be avoided by a minimum of 50 feet to avoid take and potentially significant impacts. If CBB are detected during surveys and ground-disturbing activities will occur during the overwintering to nesting period (year-round, except possibly September), consultation with CDFW is warranted to discuss how to implement Project activities and avoid take. Any detection of CBB prior to or during Project implementation warrants consultation with CDFW to discuss how to avoid take.

Recommended Mitigation Measure 11: CBB Take Authorization

If take cannot be avoided, take authorization through the acquisition of an ITP, pursuant to Fish and Game Code section 2081 subdivision (b) is necessary to comply with CESA.

CDFW appreciates the opportunity to comment to assist the County in identifying and mitigating Project impacts on biological resources. If you have any questions, please contact Darcy Gonzalez, Environmental Scientist, at the address provided on this letterhead, by telephone at (559) 807-1452, or by electronic mail at Darcy.Gonzalez@wildlife.ca.gov.

Sincerely,

DocuSigned by:

FA83F09FE08945A...

Julie A. Vance
Regional Manager

ATTACHMENT 1 – CON Comment Letter with the original Mitigation Monitoring and Reporting Program
ATTACHMENT 2 – Updated Recommended Mitigation Monitoring and Reporting Program

ec: State Clearinghouse
Land Use and Climate Innovation
state.clearinghouse@lci.ca.gov

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REFERENCES

- California Department of Fish and Game. 2012. Staff Report on Burrowing Owl Mitigation. Sacramento, California, USA.
- California Department of Fish and Wildlife. 2026. Biogeographic Information and Observation System (BIOS). <https://www.wildlife.ca.gov/Data/BIOS>. Accessed August 24, 2026.
- California Department of Fish and Wildlife. 2023. Survey considerations for California Endangered Species Act (CESA) candidate bumble bee species. Sacramento, California, USA.
- Xerces Society for Invertebrate Conservation, Defenders of Wildlife, and Center for Food Safety. 2018. A petition to the state of California fish and game commission to list the Crotch's bumble bee (*Bombus crotchii*), Franklin's bumble bee (*Bombus franklini*), Suckley cuckoo bumble bee (*Bombus suckleyi*), and western bumble bee (*Bombus occidentalis occidentalis*) as Endangered under the California Endangered Species Act. October 2018.
- Zeiner, D., W. Laudenslayer, Jr., K. Mayer, and M. White. 1990. California's Wildlife. Volumes I-III in California Department of Fish and Game, editor. California Department of Fish and Wildlife, Sacramento, California, USA.

Attachment 1



State of California – Natural Resources Agency
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Central Region
1234 East Shaw Avenue
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GAVIN NEWSOM, Governor
CHARLTON H. BONHAM, Director



April 29, 2022

Thomas Kobayashi, Planner
Development Services and Capital Projects Division
2220 Tulare Street, Sixth Floor
Fresno, California 93721
TKobayashi@FresnoCountyCA.gov

Subject: Initial Study (IS) No. 8210 and Unclassified Conditional Use Permit (CUP) Application No. 3738 Project (Project) – Early Consultation

Dear Mr. Kobayashi:

The California Department of Fish and Wildlife (CDFW) received an Early Consultation request from Fresno County for the above-referenced Project pursuant to the California Environmental Quality Act (CEQA) and CEQA Guidelines.¹

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. While the comment period may have ended, CDFW would appreciate if you will still consider our comments.

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

¹ 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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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.

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.

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 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 streams include the following: increased sediment input from road or structure runoff; and toxic runoff associated with development activities and implementation. The Regional Water Quality Control Board and United States Army Corps of Engineers also have jurisdiction regarding discharge and pollution to Waters of the State.

PROJECT DESCRIPTION SUMMARY

Proponent: H2B2 USA, LLC.

Objective:

The Project is proposing to amend Unclassified CUP Application No. 3690 to allow an approximately 60-acre solar field to power the approved hydrogen generation facility on a 324.5-acre parcel in the AE-20 (Exclusive Agricultural, 20-acre minimum parcel size) Zone District.

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Location:

The Project site is located in the City of Kerman at 24387 West Whitesbridge Avenue (APN 015-100-20S). The San Joaquin River is approximately 2.5-miles north of the proposed Project site. The Kerman Ecological Reserve is approximately 1.4-miles to the northeast, and the Alkali Sink Ecological Reserve is located approximately 2.3-miles to the southwest.

Timeframe:

None listed.

COMMENTS AND RECOMMENDATIONS

CDFW offers the following comments and recommendations to assist Fresno County 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 several special-status resources that may utilize the Project site, and these resources 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 tricolored blackbird (*Agelaius tricolor*), and Swainson's hawk (*Buteo swainsoni*). In addition to these species, the Federally and State endangered Fresno kangaroo rat (*Dipodomys nitratoides exilis*), the Federally endangered and State threatened San Joaquin kit fox (*Vulpes macrotis mutica*), and the species of special concern burrowing owl (*Athene cunicularia*) and western spadefoot (*Spea hammondi*) have been observed in the proposed Project area previously.

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: Tricolored Blackbird (TRBL)

Issue: TRBL occurrences have been documented within and near the Project site (CNDDDB 2022). TRBL colonies require suitable nesting habitat, nearby freshwater, and nearby foraging habitat including semi-natural grasslands, agricultural croplands or alkali scrub (Beedy et al. 2017). Habitat both within and surrounding the Project

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area may provide suitable foraging habitat for TRBL, and a basin located just to the northeast across West Whitesbridge Avenue appears to contain water the majority of the year per Google aerial images. This wetted area was a pond in 1998 (Google historical imagery aerial). Per Project information, the northeast corner of the proposed Project site is a special flood hazard area. This could potentially provide additional freshwater habitat.

Specific impact: Without appropriate avoidance and minimization measures for TRBL, potential significant impacts associated with Project construction activities include nest and/or colony abandonment, reduced reproductive success, and reduced health and vigor of eggs and/or young.

Evidence impact would be significant: The Project site contains elements that have the potential to support TRBL nesting colonies. TRBL aggregate and nest colonially, forming colonies of up to 100,000 nests (Beedy et al. 2017). This species has been steadily declining due to annual breeding losses due to crop-harvesting activities, insufficient insect resources, and habitat loss due to land conversion for agriculture, rangeland, and urban development (Beedy et al. 2017).

Recommended Potentially Feasible Mitigation Measure(s)

To evaluate potential Project-related impacts to TRBL, CDFW recommends conducting the following evaluation of the Project site and including the following measures in the CEQA document:

Recommended Mitigation Measure 1: TRBL Surveys

CDFW recommends that a thorough TRBL habitat assessment be conducted of the proposed project site to identify how TRBL are using the site and for which stages of their life cycle. Based upon the findings of the habitat assessment, appropriate avoidance, minimization, and/or mitigation measures should be included in the project including the need for an Incidental Take Permit pursuant to Fish and Game Code section 2081(b).

CDFW also recommends that Project activities be timed to avoid the normal bird breeding season (February 1 through September 15). However, if Project activities must take place during that time, CDFW recommends that a qualified wildlife biologist conduct surveys for nesting TRBL no more than 10 days prior to the start of implementation to evaluate presence/absence of TRBL nesting colonies in proximity to Project activities and to evaluate potential Project-related impacts.

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Recommended Mitigation Measure 2: TRBL Avoidance

If an active TRBL nesting colony is found during project biological surveys or subsequent preconstruction surveys, CDFW recommends implementation of a minimum 300-foot no-disturbance buffer in accordance with CDFW's "Staff Guidance Regarding Avoidance of Impacts to Tricolored Blackbird Breeding Colonies on Agriculture Fields in 2015" (CDFW 2015). CDFW advises that this buffer remain in place until the breeding season has ended or until a qualified biologist has determined that nesting has ceased, the birds have fledged, and are no longer reliant upon the colony or parental care for survival. It is important to note that TRBL colonies can expand over time and for this reason, the colony should be reassessed to determine the extent of the breeding colony within 10 days for Project initiation.

Recommended Mitigation Measure 3: TRBL Take Avoidance

In the event that a TRBL nesting colony is detected during surveys, consultation with CDFW is warranted to discuss how to implement the Project and avoid take, or if avoidance is not feasible, to acquire an ITP, pursuant to Fish and Game Code section 2081(b), prior to any vegetation- and/or ground-disturbing activities.

COMMENT 2: Swainson's Hawk (SWHA)

Issue: Based on aerial photography, Google street view, and CNDDDB occurrences, SWHA have the potential to forage within the Project vicinity. The crop observed via Google street view could be alfalfa. SWHA favor open habitats for foraging, including crops such as alfalfa, grain, and row crops, and they have been observed immediately northeast of the Project site (CDFW 2022).

Specific impacts: Without appropriate avoidance and minimization measures for SWHA, potential significant impacts that may result from Project activities include loss of foraging habitat that would reduce nesting success (loss or reduced health or vigor of eggs or young), and direct mortality. Any take of SWHA without appropriate incidental take authorization would be a violation of Fish and Game Code.

Evidence impact is potentially significant: SWHA exhibit high nest-site fidelity year after year and lack of suitable nesting habitat in the San Joaquin Valley limits their local distribution and abundance (CDFW 2016). The Project as proposed will involve noise, groundwork, and movement of workers that could affect nests in the vicinity of the Project and has the potential to result in nest abandonment, significantly impacting local nesting SWHA.

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Recommended Mitigation Measure 4: Focused SWHA Surveys

To evaluate potential impacts, CDFW recommends that a qualified wildlife biologist conduct surveys for nesting SWHA following the survey methods developed by the Swainson's Hawk Technical Advisory Committee (SWHA TAC, 2000) during biological technical studies to support the CEQA document and analysis and again prior to project construction. The survey protocol includes early season surveys to assist the project proponent in implementing necessary avoidance and minimization measures, and in identifying active nest sites prior to initiating ground-disturbing activities.

Recommended Mitigation Measure 5: SWHA Avoidance/No-disturbance Buffer

If ground-disturbing Project activities are to take place during the normal bird breeding season (March 1 through September 15), CDFW recommends that additional pre-activity surveys for active nests be conducted by a qualified biologist no more than 10 days prior to the start of Project implementation. CDFW recommends a minimum no-disturbance buffer of ½ mile be delineated around active nests 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 parental care for survival.

Recommended Mitigation Measure 6: SWHA Foraging Habitat

CDFW recommends compensation for the loss of SWHA foraging habitat to reduce impacts to SWHA foraging habitat to less than significant based on CDFW's "Staff Report Regarding Mitigation for Impacts to Swainson's Hawks" (CDFG, 1994), which recommends that mitigation for habitat loss occur within a minimum distance of 10 miles from known nest sites and the amount of habitat compensation is dependent on nest proximity. In addition to fee title acquisition or conservation easement recorded on property with suitable grassland habitat features, mitigation may occur by the purchase of conservation or suitable agricultural easements. Suitable agricultural easements would include areas limited to production of crops such as alfalfa, dry land and irrigated pasture, and cereal grain crops. Vineyards, orchards, cotton fields, and other dense vegetation do not provide adequate foraging habitat.

Recommended Mitigation Measure 7: SWHA Take Authorization

In the event an active SWHA nest is detected during surveys and the ½-mile no-disturbance buffer around the nest cannot feasibly be implemented, consultation with CDFW is warranted to discuss how to implement the project and avoid take. If take cannot be avoided, take authorization through the acquisition of an ITP,

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pursuant to Fish and Game Code section 2081(b) is warranted to comply with CESA.

In addition to the species listed above that have been documented as being observed within or directly adjacent to the proposed Project limits per CNDDDB records, several other species have been observed in the vicinity of the Project and may have suitable habitat and/or be present within the project area. CDFW recommends that the project area be surveyed for suitable habitat for these species during biological technical studies for the project. These species include, but are not limited to, the Federally and State endangered Fresno kangaroo rat, the Federally endangered and State threatened San Joaquin kit fox, and the State species of special concern Western spadefoot and Burrowing owl.

Fresno Kangaroo Rat (FKR)

FKR can occupy grasslands with sandy soils with level terrain (USFWS 1998b). In review of aerial imagery, and per CNDDDB, there may be potentially suitable habitat near the east/northeast of the Project site. Without an appropriate habitat assessment, surveys and necessary avoidance and minimization measures for FKR, potentially significant impacts associated with the Project's construction may include burrow collapse, inadvertent entrapment, reduced reproductive success, reduction in health and vigor of young, and direct mortality of individuals. Habitat loss resulting from development is the primary threat to FKR, and very little suitable habitat for FKR remains in Fresno County (USFWS 1998b).

CDFW advises that a qualified biologist conduct a habitat assessment in advance of Project implementation, to determine if the Project area or its immediate vicinity contains suitable habitat for FKR. If suitable habitat is present, CDFW recommends focused protocol-level trapping surveys be conducted by a qualified wildlife biologist that is permitted to do so by both CDFW and U.S. Fish and Wildlife Service (USFWS), to determine if the Project area is occupied. CDFW advises that these surveys be conducted in accordance with USFWS's (2013) *"Survey Protocol for Determining Presence of San Joaquin Kangaroo Rats."* CDFW recommends these surveys be conducted during biological surveys in support of the CEQA document in order to determine if impacts to FKR could occur. If FKR is detected, immediate consultation with CDFW is warranted to discuss the Project.

San Joaquin Kit Fox (SJKF)

SJKF have been documented to occur previously within the vicinity of the Project area (CNDDDB 2022). The proposed Project area, comprised of mainly open agriculture fields and disturbed grassland, may provide foraging for this species. SJKF may be attracted to the project area due to the type and level of ground-disturbing activities and the loose, friable soils resulting from intensive ground

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disturbance. As a result, there is potential for SJKF to colonize the Project area or to occupy disturbed adjacent grassland habitat to the north, northeast, and east.

Without appropriate avoidance and minimization measures for SJKF, potentially significant impacts associated with installation of solar panels and the hydrogen generation facility may include den collapse, inadvertent entrapment, reduced reproductive success, reduction in health and vigor of young, and direct mortality of individuals. Habitat loss resulting from agricultural, urban, and industrial development is the primary threat to SJKF (Cypher et al. 2013). Therefore, subsequent ground-disturbing activities have the potential to significantly impact local SJKF populations.

CDFW recommends that a qualified biologist conduct a habitat assessment in advance of Project implementation, to determine if the Project area or its immediate vicinity contains suitable habitat for SJKF. CDFW recommends assessing presence/absence of SJKF by conducting surveys following the USFWS “Standardized recommendations for protection of the San Joaquin kit fox prior to or during ground disturbance” (2011). Specifically, CDFW advises conducting these surveys in all areas of potentially suitable habitat during biological surveys in support of the CEQA document and, depending on the results and habitat assessment, repeated no less than 14 days and no more than 30 days prior to beginning of ground disturbing activities. SJKF detection warrants consultation with CDFW to discuss how to avoid take, or if avoidance is not feasible, to acquire an ITP prior to ground-disturbing activities, pursuant to Fish and Game Code section 2081(b).

Burrowing Owl (BUOW)

BUOW have been observed approximately 3.0-miles to the east of the proposed Project site previously (CNDDDB 2022). BUOW inhabit open grassland or adjacent canal banks, ROWs, vacant lots, etc. containing small mammal burrows, a requisite habitat feature used by BUOW for nesting and cover. As previously mentioned, the Project site is bordered by annual/disturbed grassland on several sides.

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). During biological studies in support of the CEQA document for this project, 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.

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If BUOW are found within the recommended buffers and avoidance is not possible, it is important to note that according to the Staff Report (CDFG 2012), exclusion is not a take avoidance, minimization, or mitigation method and is considered a potentially significant impact under CEQA. However, if necessary, CDFW recommends that burrow exclusion be conducted by qualified biologists and only during the non-breeding season, before breeding behavior is exhibited and after the burrow is confirmed empty through non-invasive methods, such as surveillance. CDFW recommends replacement of occupied burrows with artificial burrows at a ratio of 1 burrow collapsed to 1 artificial burrow constructed (1:1) as mitigation for the potentially significant impact of evicting BUOW. BUOW may attempt to colonize or re-colonize an area that will be impacted; thus, CDFW recommends ongoing surveillance, at a rate that is sufficient to detect BUOW if they return.

Western Spadefoot (WESP)

WESP are known to occur in the Project vicinity and were observed approximately 1-mile away to the northeast in previous years (CDFW 2022). WESP inhabit grassland habitats, breed in seasonal wetlands, and seek refuge in upland habitat where they occupy burrows outside of the breeding season (Thomson et al. 2016). Review of aerial imagery indicates that these requisite habitat elements occur in the Project area, as well as in the northeast portion of the Project site where the special flood hazard area is located per Project information.

Habitat loss and fragmentation resulting from agricultural and urban development is the primary threat to WESP (Thomson et al. 2016). As a result, ground-disturbing activities associated with the Project site have the potential to significantly impact local populations of this species.

During biological studies in support of the CEQA document for this project, CDFW recommends that a qualified biologist conduct focused surveys for WESP and their requisite habitat features to evaluate potential impacts resulting from ground- and vegetation-disturbance. Avoidance whenever possible is encouraged via delineation and observance of a 50-foot no-disturbance buffer around burrows. If WESP are observed on the Project site, CDFW recommends that Project activities in their immediate vicinity cease and individuals be allowed to leave the Project site on their own accord. Alternatively, a qualified biologist with appropriate take authorization can move them out of harm's way and to a suitable location.

II. Editorial Comments and/or Suggestions

Lake and Streambed Alteration: The Project contains activities that may result in the Project site being subject to CDFW's regulatory authority pursuant Fish and Game Code section 1600 et seq. Fish and Game Code section 1602 requires an entity to notify CDFW prior to commencing any activity that may (a) substantially divert or

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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; 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, such as the unnamed stream within the Project site, as well as those that are perennial in nature.

For additional information on notification requirements, please contact our staff in the Lake and Streambed Alteration Program at (559) 243-4593. It is important to note, CDFW is required to comply with CEQA, as a Responsible Agency, when issuing a Lake or Streambed Alteration Agreement (LSAA). If inadequate, or no environmental review, has occurred, for the Project activities that are subject to notification under Fish and Game Code section 1602, CDFW will not be able to issue the Final LSAA until CEQA analysis for the project is complete. This may lead to considerable Project delays.

Federally Listed Species: CDFW recommends consulting with the USFWS on potential impacts to federally listed species including, but not limited to, the Fresno kangaroo rat and the San Joaquin kit fox. 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.

Nesting Birds: The Project area contains trees that could provide nesting habitat for 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 sections 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. Prior to initiation of Project activities, CDFW recommends that a qualified biologist conduct a survey to establish a behavioral baseline of all identified nests. Once Project activities begins, CDFW recommends having a qualified biologist continuously monitor nests to detect behavioral changes resulting from the Project. If

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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 Project site 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.

Cumulative Impacts: CDFW recommends that a cumulative impact analysis be conducted for all biological resources that will either be significantly or potentially significantly impacted by implementation of the project, including those whose impacts are determined to be less than significant with mitigation incorporated or for those resources that are rare or in poor or declining health and will be impacted by the project, even if those impacts are relatively small (i.e. less than significant). Cumulative impacts should be analyzed using an acceptable methodology to evaluate the impacts of past, present, and reasonably foreseeable future projects on resources and should be focused specifically on the resource, not the project. An appropriate resource study area should be identified and utilized for this analysis. CDFW staff is available for consultation in support of cumulative impacts analyses as a trustee and responsible agency under CEQA.

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 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. The types of information reported to CNDDDB can be found at the following link: <https://www.wildlife.ca.gov/Data/CNDDDB/Plants-and-Animals>.

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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 & G. Code, § 711.4; Pub. Resources Code, § 21089).

CDFW appreciates the opportunity to comment on the Project to assist Fresno County Department of Public Works and Planning 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 Kelley Nelson, Environmental Scientist, at the address provided on this letterhead, or by electronic mail at Kelley.Nelson@wildlife.ca.gov.

Sincerely,

DocuSigned by:

96D42C58E092466...
Valerie Cook
Acting Regional Manager

Attachment

ec: Patricia Cole (patricia_cole@fws.gov)
United States Fish and Wildlife Service

Linda Connolly
California Department of Fish and Wildlife

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- CDFW. 2015. Staff Guidance Regarding Avoidance of Impacts to Tricolored Blackbird Breeding Colonies on Agricultural Fields in 2015. March 19, 2015.
- Kelsey, R. 2008. Results of the tricolored blackbird 2008 census. Report submitted to U.S. Fish and Wildlife Service, Portland, OR, USA.
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SWHA Literature Citations

- CDFW. 2016. Five Year Status Review for Swainson's Hawk (*Buteo swainsoni*). California Department of Fish and Wildlife. April 11, 2016.
- CDFW. 2022. Biogeographic Information and Observation System (BIOS). <https://www.wildlife.ca.gov/Data/BIOS>. Accessed April 19, 2022.
- Swainson's Hawk Technical Advisory Committee (SWHA TAC). 2000. Recommended Timing and Methodology for Swainson's Hawk Nesting Surveys in California's Central Valley. Swainson's Hawk Technical Advisory Committee, May 31, 2000.

FKR

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SJKF Literature Citations

Cypher, B. L., S. E. Phillips, P. A. Kelly, 2013. Quantity and distribution of suitable habitat for endangered San Joaquin kit foxes: conservation implications. *Canid Biology and Conservation* 16(7): 25–31.

USFWS. 2011. Standard recommendations for the protection of the San Joaquin kit fox prior to or during ground disturbance. United States Fish and Wildlife Service, January 2011.

BUOW Literature Citations

California Burrowing Owl Consortium. 1993. Burrowing owl survey protocol and mitigation guidelines. April 1993.

CDFG. 2012. Staff Report on Burrowing Owl Mitigation. California Department of Fish and Game.

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.

WESP Literature Citations

Thomson, R. C., A. N. Wright, and H. Bradley Shaffer, 2016. California Amphibian and Reptile Species of Special Concern. California Department of Fish and Wildlife and University of California Press.

Attachment 1

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

**PROJECT: 2022-0199 H2B2 USA-Initial Study (IS)-8120, Unclassified Conditional
Use Permit (CUP) – Early Consultation**

RECOMMENDED MITIGATION MEASURE	STATUS/DATE/INITIALS
<i>Before Disturbing Soil or Vegetation</i>	
Mitigation Measure 1: TRBL Surveys	
Mitigation Measure 4: Focused SWHA Surveys	
Mitigation Measure 6: SWHA Foraging Habitat	
<i>During Construction</i>	
Mitigation Measure 2: TRBL Avoidance	
Mitigation Measure 3: Take Avoidance	
Mitigation Measure 5: SWHA Avoidance/No-disturbance Buffer	
Mitigation Measure 7: SWHA Take Avoidance	

Attachment 2

Attachment 2

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

**PROJECT: 2022-0199 H2B2 USA-Initial Study (IS)-8120, Unclassified
Conditional Use Permit (CUP) – Early Consultation**

SCH No.: 2023040497

RECOMMENDED MITIGATION MEASURE	STATUS/DATE/INITIALS
<i>Before Disturbing Soil or Vegetation</i>	
Recommended Mitigation Measure 1: AMBA Pre-construction Surveys	
Recommended Mitigation Measure 3: BUOW Pre-construction Surveys	
Recommended Mitigation Measure 5: BUOW Take Authorization	
Recommended Mitigation Measure 6: WESP Pre-construction Surveys	
Recommended Mitigation Measure 8: WESP Take Authorization	
Recommended Mitigation Measure 9: CBB Pre-construction Surveys	
Recommended Mitigation Measure 11: CBB Take Authorization	
<i>During Construction</i>	
Recommended Mitigation Measure 2: AMBA Avoidance Buffer	
Recommended Mitigation Measure 4: BUOW Avoidance Buffer	
Recommended Mitigation Measure 7: WESP Avoidance Buffer	
Recommended Mitigation Measure 10: CBB Avoidance Buffer	