General Biological Survey Report 3730 Francis Avenue Battery Storage Project



Capacity Power Group

Prepared by



Tetra Tech, Inc.

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List of Acronyms

- BESS battery energy storage system
- BUOW burrowing owl
- CDFW California Department of Fish and Wildlife
- CEQA California Environmental Quality Act
- CNDDB California Natural Diversity Database
- CRPR California Rare Plant Rank
- MBTA Migratory Bird Treaty Act
- NWI National Wetlands Inventory
- SSC CDFW Species of Special Concern
- Tetra Tech Tetra Tech, Inc.
- USDA NRCS U.S. Department of Agriculture National Resources Conservation Service
- USFWS U.S. Fish and Wildlife Service
- USGS U.S. Geological Survey

1.0 Introduction

Capacity Power Group contracted Tetra Tech, Inc. (Tetra Tech) to conduct a general biological survey in support of the 3730 Francis Avenue Battery Storage Project. Project activities would involve the installation of a 160 megawatt-hour battery energy storage system (BESS). The BESS would interconnect to the adjacent Southern California Edison's Francis Substation located in the City of Chino, California. The Project site consists of the proposed BESS area and is approximately 1.5 acres. The Project site and a 150-meter buffer around the site were assessed for biological resources.

This report presents the methods and results of the general biological survey conducted in April 2022. The purpose of this survey was to characterize the habitats and species present, including special-status species, and to conduct a burrowing owl (*Athene cunicularia*, BUOW) habitat assessment in the proposed BESS area and 150-meter buffer. Special-status species are defined herein as plants and wildlife with a status of sensitive, threatened, endangered, rare or candidate by the California Department of Fish and Wildlife (CDFW), U.S. Fish and Wildlife Service (USFWS), or California Native Plant Society (CNPS). Species that hold special status by local jurisdictions (e.g., specific trees or biological resources protected by the County) are also considered special-status species.

2.0 Survey Area

The Project site (proposed BESS area) is located at 3730 Francis Ave, Chino, California 91710 and is within San Bernardino County. A regional overview of the Project is shown in Figure 1 and the specific Project site is shown in Figure 2. The site is approximately centered at a latitude of 34.041090 and longitude of -117.723858 (decimal degrees) and is located within Section 33, Township 01 South, Range 08 West. The site in Assessor's Parcel Number 1013-251-10-0000 and is zoned as "Single Residential" by San Bernardino County. The overall Project area is in the U.S. Geological Survey (USGS) *Ontario* 7.5-Minute Topographic Quadrangle Map. The proposed BESS area is currently used for residential purposes. The surrounding area is comprised of industrial and residential developments.

3.0 Methods

3.1 Literature Search

Prior to the field survey, a search of the California Natural Diversity Database (CNDDB) was performed to determine special-status species that may occur within the Project site and within a 5-mile radius around the Project site (CDFW 2022). A review of the USFWS National Wetlands Inventory (NWI) online data was also performed to determine potential locations of wetlands and other Waters of the U.S. that may be present (USFWS 2022). In addition, aerial imagery was assessed.

3.2 General Biological Survey

Following the literature search, a biological survey was conducted on April 14, 2022. The survey was conducted during daylight hours and not during abnormal or excessive cold, heat, rain, other inclement weather, or winds greater than 20 miles per hour. The survey was conducted on foot and by vehicle. Binoculars were used in areas that were not accessible. Photographs were collected during the survey and are provided in Attachment 1.

3.2.1 Inventory of Plants and Wildlife

All plant and wildlife species observed within the Project site were recorded. The site was surveyed for signs of wildlife, such as tracks, burrows, dens, nests, nest sites, scat, or remains. Wildlife species encountered visually or audibly during the survey were identified and recorded.

3.2.2 Vegetation Mapping

Vegetation communities were mapped in accordance with the *Manual of California Vegetation, Second Edition* (Sawyer et al. 2009). Vegetation was mapped to the alliance level, which is defined by plant species composition and identified by the most dominant tree, shrub, or herb in the vegetation community. Notes were recorded on each vegetation community as applicable (abundance of non-native species, disturbance, etc.).

3.2.3 Potential Jurisdictional Features

An assessment of potential jurisdictional wetland features was conducted during the general biological survey. The presence or absence of the potential wetland features identified during the literature search was verified and any additional features observed in the field were noted. Notes on vegetation, soils, and hydrology were recorded at any potential feature. Photos and locations of any potential features were also recorded.

3.2.4 Special-Status Species Habitat Assessment

The Project site was assessed for special-status species and their habitats. To assess habitat for special-status species, soil types, vegetation cover, and disturbance were evaluated. During the survey, potential BUOW burrows and burrow surrogates were recorded when observed. Burrows occupied by California ground squirrel (*Otospermophilus beecheyi*) or pocket gophers (*Thomomys* sp.) were also noted, if present. Habitat in the 150-meter buffer around the site was also assessed. The habitat assessment for BUOW is described in the subsection below.

The site was also assessed for nesting bird and raptor habitat. Aerial imagery and binoculars were used to find and survey potential trees and other features (e.g., power poles) that could be used for raptor nesting. Visual surveys for nests and perched raptors was completed throughout the area surveyed.

Potential bat roosting habitat was also recorded, if present. To assess potential habitat for bats, the site was surveyed for available drinking water, prey base, and potential roost sites.

Burrowing Owl Habitat Assessment

BUOW use a variety of habitat types characterized by low-growing vegetation and the presence of burrows or burrow-like structures (burrow surrogates). BUOW habitat typically includes short or sparse vegetation, presence of burrows, burrow surrogates, well-drained soils, and a prey base of invertebrates and small vertebrates (CDFW 2012). Vacant lots can be considered suitable habitat for BUOW, depending upon the presence of burrowing mammals or suitable burrow surrogates (The California Burrowing Owl Consortium 1993). BUOW may use generally poor habitats, such as ruderal grassy fields, if these areas are supplemented with neighboring foraging habitat and burrows (CDFW 2012).

Pedestrian survey transects were walked in areas of suitable habitat if found within the Project site and a 150-meter buffer around the site to allow 100 percent visual coverage of the ground surface. If burrows/burrow surrogates of sufficient size (3 inches in diameter or greater) or BUOW were observed, their locations were mapped. Burrow surrogates are defined as man-made structures such as pipes, culverts, debris piles, or other various openings that meet the size criteria. All burrows were investigated for signs of use, including the presence of pellets, feathers, nearby individuals, etc. Potential prey species and the presence of potential predators were also recorded.

4.0 Results

4.1 Literature Search

A review of the USFWS NWI online data did not identify any potential jurisdictional features within the Project site (USFWS 2022).

4.2 General Biological Survey

4.2.1 Inventory of Plants and Wildlife

Tables 1 and 2 provide a list of the plant and wildlife species observed in the Project site.

Scientific Name	Common Name
Ailanthus altissima	Tree of heaven
Bougainvillea glabra ¹	Paper flower ¹
Brassica nigra 1	Black mustard ¹
Bromus diandrus ¹	Ripgut grass ¹
Capsella bursa-pastoris ¹	Shepherd's purse ¹
Cotula australis ¹	Australian cotula ¹
Erodium cicutarium ¹	Redstem filaree ¹
Eucalyptus gunnii 1	Cider gum ¹
Helminthotheca echioides ¹	Bristly ox-tongue ¹
Hordeum murinum ¹	Wall barley ¹
Lactuca serriola ¹	Prickly lettuce ¹

Table 1: Plant Species Observed in the Project Site

Scientific Name	Common Name
Lepidium oblongum	Veiny pepper grass
Lophocereus schottii	Senita cactus
Malva parviflora ¹	Cheeseweed ¹
Nerium oleander 1	Oleander ¹
Schinus sp. 1	Pepper tree ¹
Sisymbrium irio ¹	London rocket ¹
Solanum sp.	Nightshade
Washingtonia robusta 1	Mexican fan palm ¹

1 Non-native species

 Table 2: Wildlife Species Observed in the Project Site

Scientific Name	Common Name	Таха
Passer domesticus	House sparrow	Bird
Sayornis nigricans 1	Black phoebe ¹	Bird
Sturnus vulgaris	European starling	Bird
Tyrannus verticalis 1	Western kingbird ¹	Bird
Pogonomyrmex californicus	California harvester ant	Insect

1 Species protected by the MBTA.

4.2.2 Vegetation Mapping

Historically, the Project site consisted of a residential lot with grass and sparse tree canopy since 1994 or earlier. Based on analysis of historical aerial imagery, the Project site and surrounding areas were developed over the past 30 years since 1994 or earlier. Aerial imagery also shows that areas surrounding the Project site have been used for industry and product shipping since 1994 or earlier, with the density of residential development increasing over time.

Table 3 lists the vegetation communities observed and their corresponding acreage within the Project site and 150-meter buffer based on the April 2022 survey. The acres reported in Table 3 for the 150-meter buffer do not include acres within the Project site. Results of the vegetation mapping are shown in Figure 3.

 Table 3. Vegetation Communities within the Project Site and 150-meter Buffer

 Image: Communities within the Project Site and 150-meter Buffer

Vegetation Community	Proposed BESS Area (acres)	150-meter Buffer (acres)
<i>Avena</i> spp. – <i>Bromus</i> spp. Herbaceous Semi- Natural Alliance	0.31	0
Developed	1.08	28.31
Disturbed	0	0.26
Total	1.39	28.57

Project Site (**Proposed BESS Area**). The proposed BESS site was mainly covered by housing units and a paved access road leading to the Francis Substation. The site also had two small patches of non-native grassland in the *Avena* spp. – *Bromus* spp. Herbaceous Semi-Natural Alliance. This community supported ripgut grass (*Bromus diandrus*) and had a relatively higher cover of forbs, including redstem filaree (*Erodium cicutarium*) and London rocket (*Sisymbrium irio*), likely due to intermittent mowing. No small mammal burrows were observed in the non-native grassland areas. Two Mexican fan palms (*Washingtonia robusta*) that were approximately 15 to 25 feet tall were located on the western edge and in the center of the site. One 25-foot-tall pepper tree (*Schinus* sp.)

and one tree of heaven (*Ailanthus altissima*) were also located in the center. No aquatic features or sensitive vegetation communities were present.

150-meter Buffer Around Project Site. The 150-meter buffer was developed, with most of the area covered by residential housing or industrial lots, as well as graded and unvegetated surfaces. The 150-meter buffer also supported a variety of ornamental trees.

4.2.3 Potential Jurisdictional Features

No potential jurisdictional features occur in the Project site or 150-meter buffer around the site.

4.2.4 Special-Status Species Habitat Assessment

This section reviews the lack or presence of suitable habitat for special-status species identified during the literature search. Based on the literature search, the Project site has the potential to contain habitat for tri-colored blackbird (*Agelaius tricolor*), BUOW, California black rail (*Laterallus jamaicensis coturniculus*), coastal California gnatcatcher (*Polioptila californica californica*), western mastiff bat (*Eumops perotis californicus*), western yellow bat (*Lasiurus xanthinus*), and southern California legless lizard (*Anniella stebbinsi*) (CDFW 2022). The potential for each species to occur has been reviewed and updated based on the results of the field survey and is described below.

Potential species were excluded from analysis if their necessary habitat was not present on the Project site (for example, coastal California gnatcatcher). The following habitat types were not present on the Project site or surrounding area: scrub habitat, wetland habitat, or habitat with loose/friable soils.

Rare Plants. Topsoil within the Project site was covered in dense, non-native vegetation and is intermittently mowed. Therefore, habitats that could support rare plants do not occur.

Bats: Mexican fan palms that were tall enough and had enough frond cover to support bat roosting were found within the Project site. However, due to the lack of adjacent open grassy areas for foraging or nearby water sources, it is unlikely that bats would roost onsite.

Nesting Raptors: There are isolated trees in the Project site that were tall enough and had enough canopy cover to support raptor nesting; however, the density of residential development surrounding these isolated trees provides no foraging habitat and few perches for hunting. In addition, no raptor activity or nests were observed during the general biological survey. Therefore, it is unlikely that raptors would nest onsite.

Other Nesting Birds: Native birds and their nests are protected under the Migratory Bird Treaty Act (MBTA). There was a minor amount of vegetation within the Project site that could support nesting birds. Trees suitable for nesting (e.g., pepper tree, tree of heaven, Mexican fan palm) occur within the site. No aquatic features are located on the Project site and the site would not support bird species typically found in wetland habitats such as tricolored blackbird or California black rail.

BUOW: According to the CNDDB, the closest recorded BUOW occurrence is approximately 4 miles from the Project site in 2009 (CDFW 2022). Habitat at this location includes an open field with grassy/weedy areas, ornamental trees, and ground squirrels (CDFW 2022). There are no records of

BUOW occupying the Project site or immediately adjacent areas (CDFW 2022). Although the Project site supports two small areas of non-native grassland, the site is mostly developed and does not provide habitat for burrowing species such as BUOW. No small mammal burrows, burrow surrogates, or BUOW sign (e.g., whitewash or pellets) were observed during the survey. In addition, no ground squirrels were observed. While BUOW may utilize non-native grassland habitat, this species requires suitable vegetation structure (i.e., short or sparse), useable burrows, and available prey base (CDFW 2012). In addition to a lack of prey base and burrows, the Project site is also disturbed by consistent noise and light from residential and vehicle use. Therefore, BUOW is unlikely to be found onsite. In addition, no burrows suitable for BUOW were found within the 150-meter buffer.

5.0 Summary and Conclusions

The Project site is not within the planning area of a CDFW-approved Habitat Conservation Plan or Natural Community Conservation Plan. The recommendations within this report are preliminary and will be refined during the California Environmental Quality Act (CEQA) process as more details about the Project design and schedule are determined.

No potential BUOW burrows or burrow surrogates (i.e., culverts, pipes), or BUOW individuals or sign were observed during the survey. BUOW would not occur on the Project site since it does not support suitable habitat, and therefore, this species would not be affected by Project activities. Based on these findings, BUOW protocol-level surveys or pre-construction surveys are not recommended.

Construction activities and noise that occur in and adjacent to the Project site have the potential to affect nesting birds; therefore, the following pre-construction measures are recommended:

- Avoid ground-disturbing and vegetation removal activities during the nesting bird season (February 1 to August 31). If these activities must occur during the nesting season, a preconstruction nesting bird survey would be conducted by a qualified biologist on and within 250 feet of the Project area. The survey would be conducted no more than 10 days prior to initiation of ground-disturbance or construction activities and repeated between delays of greater than 10 days during the nesting season.
- If an active nest is found, an appropriate no-disturbance buffer for the species would be established by a qualified biologist. No ground-disturbing or vegetation removal activities would occur within the buffer until the nesting season has ended or the nest is vacated and juveniles have fledged, as determined by a qualified biologist. At the discretion of a qualified biologist, encroachment into the buffer may occur for non-listed bird species.

Although the Mexican fan palms observed in the Project site could provide potential bat roosting habitat, the lack of adjacent foraging habitat or water sources makes roosting unlikely. Therefore, no recommendations are included for bat species.

6.0 References

CDFW. 2012. Staff Report on Burrowing Owl Mitigation. March.

- CDFW. 2022a. California Natural Diversity Database. Accessed March 2022.
- Sawyer, J., Keeler-Wolf, T., and Evens, J. 2009. *A Manual of California Vegetation*, Second Edition. California Native Plant Society.
- The California Burrowing Owl Consortium. 1993. *Burrowing Owl Survey Protocol and Mitigation Guidelines*. April.
- USFWS. 2022. National Wetlands Inventory. Wetlands Mapper. https://www.fws.gov/wetlands/data/Mapper.html. Accessed April 2022.

Figures



Not for Construction



Not for Construction



Not for Construction

Attachment 1. Photographs

Photograph 1 Date: April 2022 Notes: Avena spp. - Bromus spp. Herbaceous Semi-Natural Alliance habitat is present with high cover of non-native forbs. Location: Project site Aspect: North



Photograph 2 Date: April 2022 Notes: View of structures and potential bird nesting habitat in trees. Location: Project site Aspect: Southeast