

DOCKETED	
Docket Number:	23-OPT-02
Project Title:	Darden Clean Energy Project
TN #:	260657
Document Title:	Supplemental Data Response Set 1 - Appendix F SUP DR BIO-3 Updated PV and Gen-tie Biological Resources Management Plan Part 1
Description:	Includes the updated PV and Gen-tie Biological Resources Management Plan, provided in response to SUP DR BIO-3 as Appendix F of Supplemental Response Set 1. (Part 1/2)
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Submission Date:	12/13/2024 4:42:12 PM
Docketed Date:	12/13/2024

Appendix F - Redline

SUP DR BIO-3 Updated PV and Gen-tie Biological Resources Management Plan



Darden Clean Energy Project

PV and Gen-Tie Biological Resources Management Plan

prepared for

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c/o Intersect Power, LLC

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DecemberApril 2024



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1 Introduction

Rincon has prepared this Photovoltaic Array (PV) and Generation intertie line (Gen-tie) Biological Resources Management Plan on behalf of IP Darden I, LLC and Affiliates (Project Owner), for the Darden Clean Energy (Project), in unincorporated Fresno County, California. This plan has been prepared at the request of the California Energy Commission (CEC) and incorporates relevant information from Section 5.12 *Biological Resources* of the CEC Application (Rincon 2023a). The purpose of the plan is to outline the biological resources mitigation, monitoring, and reporting procedures that shall be implemented during construction of the PV arrays, battery energy storage system (BESS), ~~hydrogen facility (options 1 and 2)~~, and gen-tie components of the Project.

Additional biological resources management plans for the Project include:

- **Utility Switchyard ~~and Alternate Green Hydrogen Site~~ Biological Resources Management Plan.** This plan outlines the biological resources mitigation, monitoring, and reporting procedures that shall be implemented during construction of the utility switchyard ~~and, if it is developed, the alternate green hydrogen site~~ components of the Project (Rincon 2024a).
- **Burrowing Owl Management Plan.** This plan outlines the biological resources mitigation, monitoring, and reporting procedures that shall be implemented for all components of the Project as they relate to burrowing owl (*Athene cunicularia*) during the pre-construction, construction, and operations and maintenance phases (Rincon 2024b).
- **Swainson's Hawk Conservation Strategy.** This conservation strategy addresses potential effects to Swainson's hawk (*Buteo swainsoni*) nesting and foraging habitat on the Project during construction, operations, and maintenance (O&M) phases (Rincon 2023b).
- **Operations and Maintenance Biological Resources Management Plan.** This plan will outline the biological resources mitigation, monitoring, and reporting procedures that shall be implemented for all components of the Project during the O&M phase.

1.1 Project Description

The overall Project consists of the construction, operation, and eventual repowering or decommissioning of a 1,150 megawatt (MW) solar PV facility, an up to 4,600 megawatt-hour (MWh) battery energy storage system (BESS), ~~an up to 800 MW green to hydrogen generator~~, a 34.5-500 kilovolt (kV) grid substation, a ~~1015-mile (up to 15 mile)~~ 500 kV gen-tie line, a 500 kV utility switchyard along the Pacific Gas and Electric Company (PG&E) Los Banos-Midway #2 500 kV transmission line, and appurtenances. This plan is specific to construction of the PV arrays, BESS, substation, ~~hydrogen facility (including options 1 and 2 of these components)~~, and gen-tie portions of the Project.

Construction of the Project is anticipated to take between 18 and 36 months to complete and the Project would be operational by 2028.

The Project would operate for approximately 35 years, at which time Project facilities would be either repowered or decommissioned. Following decommissioning, the Project site would be restored and reclaimed to the extent practicable to pre-construction conditions consistent with site lease agreements.

1.2 Project Location

The Project site is located in an agricultural area of unincorporated Fresno County south of the community of Cantua Creek (Figure 1). The proposed PV solar facility, BESS, and substation, ~~and hydrogen facility (including options 1 and 2 of these components)~~ would be located on approximately 9,100 acres of land owned by Westlands Water District, between South Sonoma Avenue to the west and South Butte Avenue to the east (Figure 2). The proposed gen-tie line (approximately 10 to 15 miles) would span west from the intersection of South Sonoma Avenue and West Harlan Avenue to immediately west of Interstate 5, where it would connect to the new utility switchyard (Figure 2). ~~The alternate green hydrogen site being considered is located adjacent to the proposed utility switchyard site (Figure 2).~~

Land cover types include fallow lands, tilled and disked fields containing ruderal vegetation, orchards, and other active farming on the Project site. In this plan, non-active agriculture fields prior to vegetation growth are referred to as “fallow”, and as “disked” if evidence of disking was present. Surrounding properties include fallow and agricultural lands. The Project’s gen-tie line spans privately-owned land on the western portion of the Project site with land-cover types including active agriculture (primarily orchards) and fallow fields. The California Aqueduct bisects the gen-tie parcels, running generally north-south. Compacted dirt and paved roads border and separate each land-cover type.

This plan is applicable only to the PV arrays, BESS, substation, ~~hydrogen facility,~~ and gen-tie portions of the Project site ~~(including options 1 and 2 of these components)~~.

Figure 1 Regional Location Map

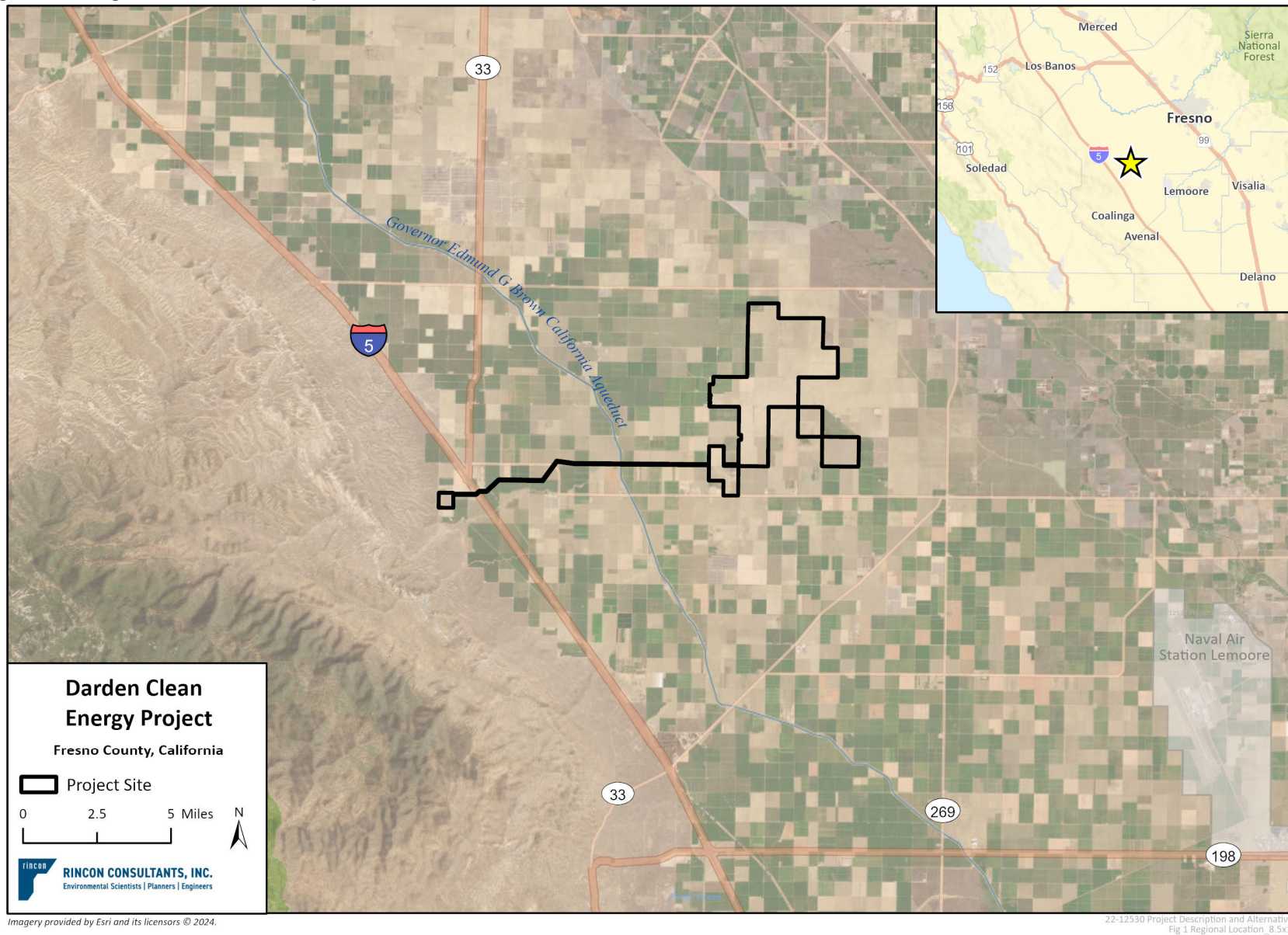
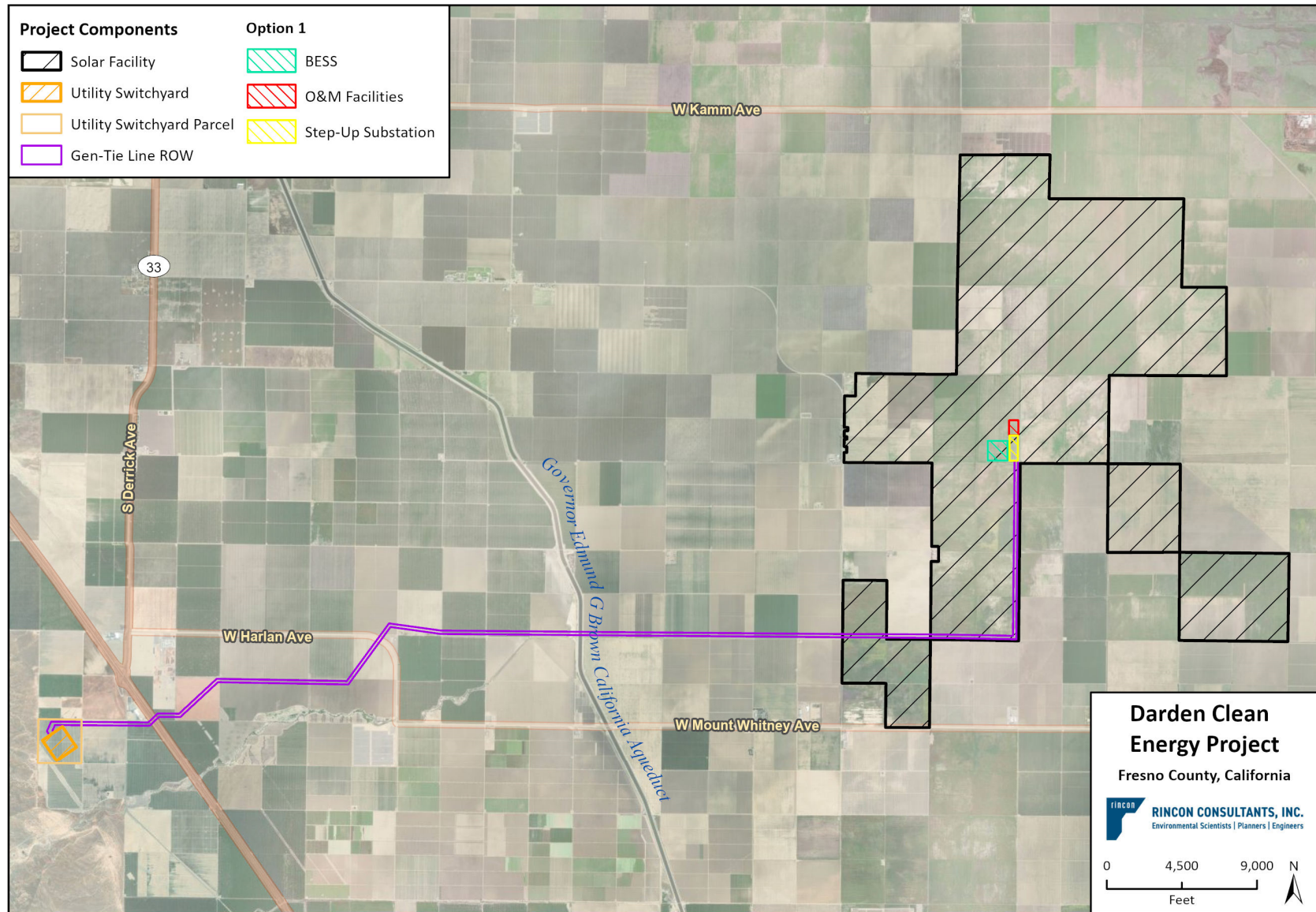


Figure 2 Project Map



22-12530 Project Description and Alternatives
 Fig X Project Site_8.5x11

2 Existing Conditions

2.1 General Site Conditions

2.1.1 Topography and Geography

The Project site is located in unincorporated Fresno County in the San Joaquin Valley. The San Joaquin Valley is bounded by the Sacramento – San Joaquin River Delta to the north, the Diablo Mountain Range to the west, the Sierra Nevada Mountains to the east, and the Tehachapi Range to the south. The region is primarily composed of agricultural land dating back to as early as the 1940s, and cattle grazing land, with areas of residential and industrial development primarily concentrated near Fresno. Vegetation occurring in the San Joaquin Valley mostly consist of annual/ruderal grassland, pasture, cropland, valley-foothill riparian, vernal pool, alkali scrub, and orchard-vineyard (Fresno County 2000). The Project’s Biological Study Area (BSA), the approximately 9,500-acre Project site encompassing all proposed Project components and a general 100-ft buffer, is relatively flat, with elevations ranging from approximately 186 to 644 feet above mean sea level, increasing in elevation from the east to the west and southwest towards the Diablo Range. Geography in the vicinity of the BSA includes agriculture with a few small scattered rural residential areas and small solar facilities.

2.1.2 Vegetation and Other Land Cover

During biological surveys in 2022 and 2023, the BSA was dominated by active and seasonally managed non-active agricultural fields. ~~During the spring, tomatoes and garlic were grown on some of the parcels, and m~~Most of the non-active parcels were grown over with mustard (*Brassica nigra*), then were disked in May. Plant species observed included black mustard (*Brassica nigra*), bread wheat (*Triticum aestivum*), great valley phacelia (*Phacelia ciliata*) and field bindweed (*Convolvulus arvensis*). Larger trees were generally restricted to windrows or situated around structures and included red gum eucalyptus (*Eucalyptus camaldulensis*), arroyo willow (*Salix lasiolepis*), Fremont cottonwood (*Populus fremontii*) and local agricultural trees including olive, almond, and various fruit.

~~Crops other than orchards that were cultivated in 2023 represent isolated activity that was only feasible as the result of an unusually wet winter season, and t~~The Project site is otherwise comprised completely of lands that have been retired from agricultural cultivation or are orchards. No crop fields such as alfalfa, wheat, or other grain field occur within the BSA or within the surrounding landscape. The Project site occurs within a region that has limited water availability due to the critically overdrafted groundwater subbasin. As a result, the ~~entire~~ region is ~~predominantly dominated by~~ retired agricultural lands that are disked or no longer in production.

The Project site was also visited January through March 2024. At that time, all Project areas within the PV Development Footprint, O&M facilities, Step-Up Substation, and BESS consisted of non-active agriculture (recently disked bare ground) with an isolated row of eucalyptus within the PV Development Footprint. These areas are tilled/disked several times per year and alternate between bare ground and varying levels of invasive weed growth between tilling/disking for weed control. Additionally, these areas are subject to a non-irrigation covenant that prohibits current and future irrigated agricultural use. During that same period, the gen-tie corridor consisted of a mix of non-

active agriculture as well as active agriculture with crops including tomatoes, onions, corn, and almond and pistachio orchards.

2.2 Sensitive Biological Resources

The sensitive biological resources that are present or have potential to occur within the PV arrays or gen-tie line areas are outlined in Table 1 (Rincon 2023c). Special-status species observed during the surveys are depicted on Figure 3 through Figure 7.

Table 1 Special-Status Wildlife Species Documented as Present or with the Potential to Occur in the BSA of the PV Arrays or Gen-Tie Line

Common Name	Scientific Name	Agency Status (Federal/State/Other)	Potential to Occur within the PV Arrays or Gen-tie ¹
Birds			
tricolored blackbird	<i>Agelaius tricolor</i>	–/ST/SSC	Low Potential (foraging), No Potential (nesting)
golden eagle	<i>Aquila chrysaetos</i>	–/–/FP	High Potential (foraging), No Potential (nesting)
burrowing owl	<i>Athene cunicularia</i>	–/ <u>SC</u> –/SSC	Present (nesting, foraging)
ferruginous hawk	<i>Buteo regalis</i>	–/–/WL	High Potential (winter migrant) No Potential (nesting)
Swainson’s hawk	<i>Buteo swainsoni</i>	–/ST/–	Present (nesting, foraging)
northern harrier	<i>Circus hudsonius</i>	–/–/SSC	High Potential (foraging), No Potential (nesting)
mountain plover	<i>Choradrius montanus</i>	–/–/SSC	High Potential (winter migrant) No Potential (nesting)
white-tailed kite	<i>Elanus luecurus</i>	–/–/FP	High Potential (foraging), Low Potential (nesting)
California horned lark	<i>Eremophila alpestris actia</i>	–/–/WL	Present (foraging, nesting)
prairie falcon	<i>Falco mexicanus</i>	–/–/WL	High Potential (foraging), No Potential (nesting)
California condor	<i>Gymnogyps californianus</i>	FE/SE/–	Low Potential (foraging), No Potential (nesting)
loggerhead shrike	<i>Lanius ludovicianus</i>	–/–/SSC	High Potential (foraging), No Potential (nesting)
Oregon vesper sparrow	<i>Poocetes framineus affinus</i>	–/–/SSC	High Potential (winter migrant) No Potential (nesting)
yellow warbler	<i>Setophaga petechia</i>	–/–/SSC	High Potential (migration) No Potential (nesting)
yellow-headed blackbird	<i>Xanthocephalus xanthocephalus</i>	–/–/SSC	Moderate Potential (nesting, foraging)
Mammals			
American badger	<i>Taxidea taxus</i>	–/–/SSC	Present
San Joaquin Kit Fox ²	<i>Vulpes macrotis mutica</i>	FE/ST/–	Low Potential

¹Avian species observed foraging on the Project site or passing through during their migration during biological resources surveys, but which have either no or low potential to nest on the Project site: golden eagle, ferruginous hawk, northern harrier, mountain plover, white-tailed kite, prairie falcon, loggerhead shrike, Oregon vesper sparrow, and yellow warbler.

²Management strategies for San Joaquin kit fox are provided in the Utility Switchyard ~~and Alternate Green Hydrogen Site~~ Biological Resources Management Plan (Rincon 2024a) since the species is not expected to occur within the PV Development Footprint.

FE = Federally Endangered, SE = State Endangered, ST = State Threatened, SC = State Candidate for Listing under California Endangered Species Act, FP = CDFW Fully Protected, SSC = CDFW Species of Special Concern, WL = CDFW Watch List

Source: California Natural Diversity Database (CNDDb) (Fresno County), May 2021

Figure 3 Special-Status Species Observations within BSA (Mapbook Page 1)

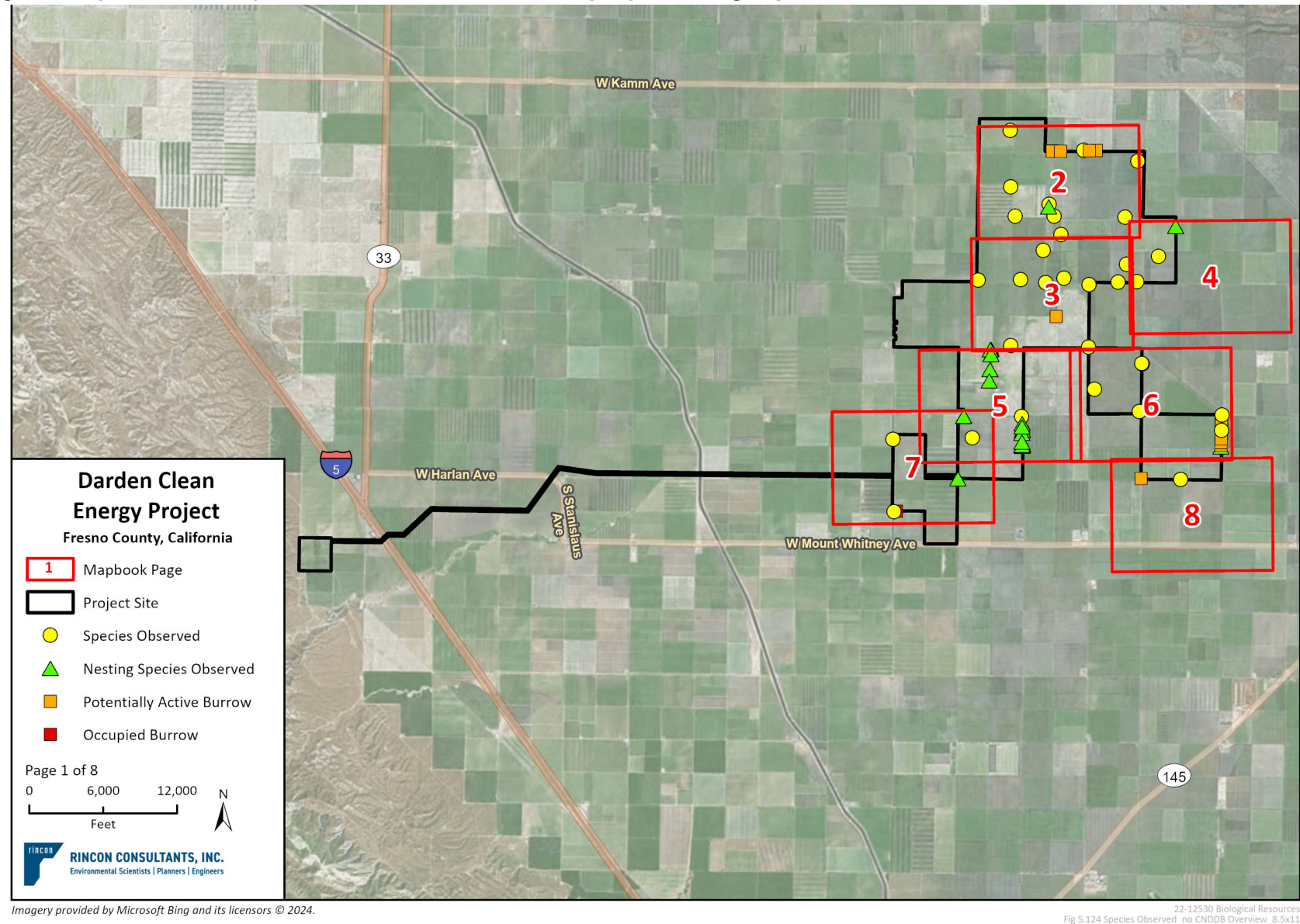


Figure 4 Special-Status Species Observations within BSA (Mapbook Page 2)

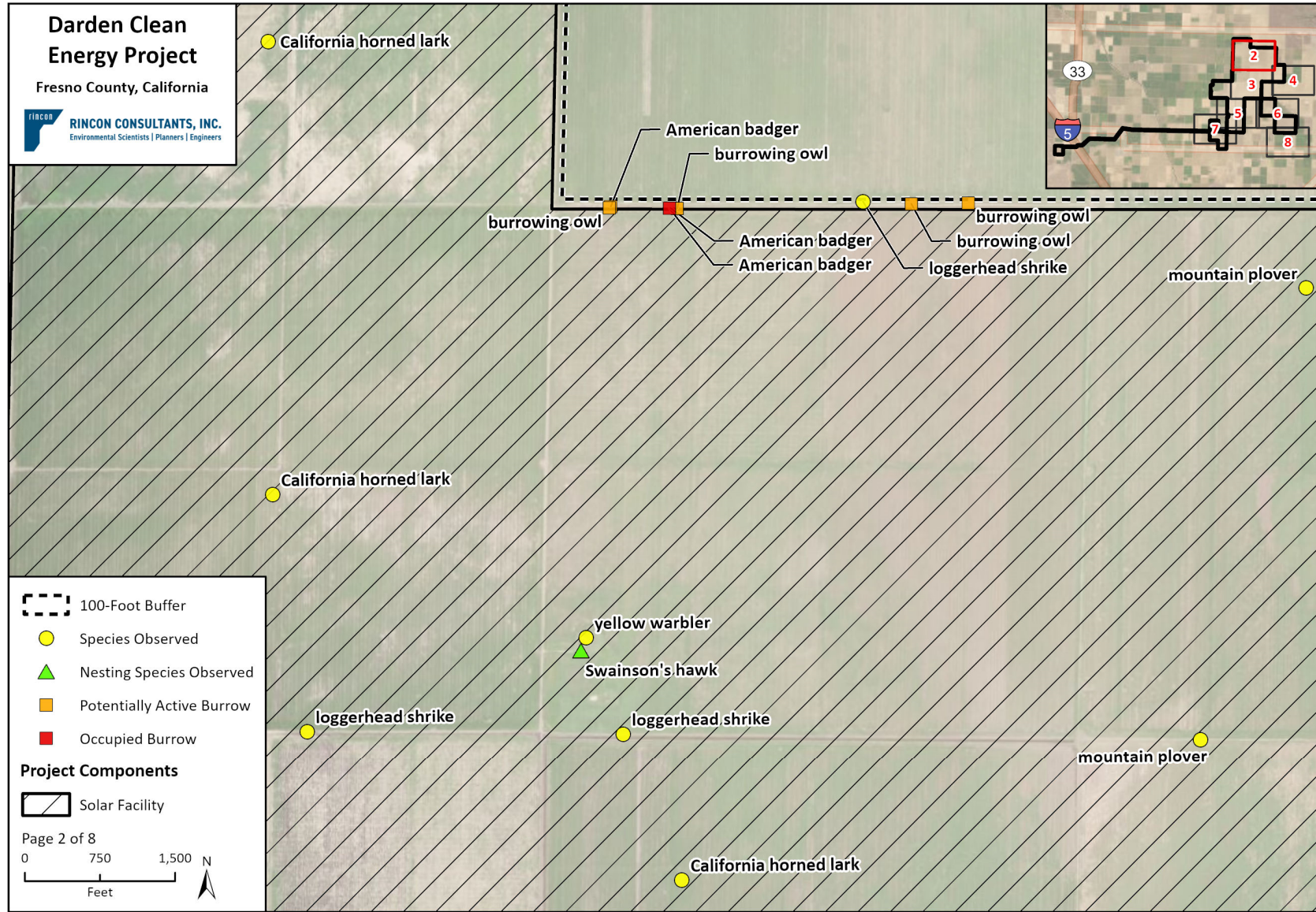


Figure 5 Special-Status Species Observations within BSA (Mapbook Page 3)

