Biological Resources Assessment for 13350 River Road, San Miguel, San Luis Obispo County, California

JULY 2018

PREPARED FOR

Shawn Payind

PREPARED BY

SWCA Environmental Consultants

BIOLOGICAL RESOURCES ASSESSMENT FOR 13350 RIVER ROAD SAN MIGUEL, SAN LUIS OBISPO COUNTY, CALIFORNIA

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"As a County-approved biologist, I hereby certify that this Biological Resources Assessment was prepared according to the Guidelines established by the County of San Luis Obispo Department of Planning and Building and that the statements furnished in the report and associated maps are true and correct to the best of my knowledge and belief; and I further certify that I was present throughout the site visit(s) associated with this report."



July 31, 2018

EXECUTIVE SUMMARY / SYNOPSIS

SWCA Environmental Consultants (SWCA) has prepared this Biological Resources Assessment (BRA) at the request of Shawn Payind (applicant) for proposed cannabis activities located at 13350 River Road in San Miguel, San Luis Obispo County, California. The purpose of this BRA is to document the biological resources on the property and identify potential impacts that could occur from the proposed project.

The project site is located just southeast of the intersection of River Road and Cross Canyons Road and approximately 1 mile east of U.S. Route 101. The applicant proposes to conduct cannabis operations in three different areas on the 63-acre parcel. The proposed operations would consist of: (1) the outdoor cultivation of a total of 3 acres in hoop houses; (2) an outdoor cannabis nursery consisting of approximately 6 acres; and (3) the utilization of a pre-existing 2,480-square-foot winery building for curing and drying, a small indoor nursery, and a virtual dispensary.

SWCA conducted a field survey on May 8, 2018, within the blooming period for special-status plant species known to occur in the area. The purpose of the field survey was to characterize the existing conditions on and adjacent to the project site and identify those biological resources that could be impacted by future development on the project site.

The Biological Survey Area (BSA) encompasses approximately 63 acres of land composed of landscaped/developed areas, agricultural land, California annual grassland, and blue oak woodland.

Based on the literature review for this project, a total of 28 special-status plant species have been documented in the Paso Robles 7.5-minute U.S. Geological Survey (USGS) topographic quadrangle, in the surrounding eight quadrangles, and/or within 5 miles of the BSA.

Based on a California Natural Diversity Database (CNDDB) query and a review of existing literature, a total of 27 sensitive wildlife species have been documented within the vicinity of the BSA. None of these species were observed during the reconnaissance survey in May 2018. Focused surveys were not conducted for these species; however, based on the presence of suitable habitat observed, the following special-status animal species have potential to occur within the BSA: California legless lizard (*Anniella pulchra*), San Joaquin whipsnake (*Masticophis flagellum ruddocki*), coast horned lizard (*Phrynosoma* blainvillii), roosting bats (i.e., pallid bat [*Antrozous pallidus*], Townsend's big-eared bat [*Corynorhinus townsendii*] and hoary bat [*Lasiurus cinereus*]), Monterey dusky-footed woodrat (*Neotoma macrotis luciana*), Salinas pocket mouse *(Perognathus inornatus psammophilus*), *American badger (Taxidea taxus*), San Joaquin kit fox (*Vulpes macrotis mutica*), golden eagle (*Aquila* chrysaetos), burrowing owl (*Athene cunicularia*), ferruginous hawk (*Buteo regalis*), California horned lark (*Eremophila alpestris actia*), prairie falcon *(Falco mexicanus*), and nesting birds.

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1 INTRODUCTION

1.1 Purpose of Biological Resources Assessment

SWCA Environmental Consultants (SWCA) has prepared this Biological Resources Assessment (BRA) at the request of Shawn Payind (applicant) for the proposed cannabis-growing operations located at 13350 River Road, San Miguel, San Luis Obispo County, California. The purpose of this BRA is to document the biological resources on the property and identify impacts that could occur from the proposed project. This analysis has taken into consideration biological resources such as sensitive habitats, plant species, and animal species that are known to occur in the Paso Robles 7.5-minute U.S. Geological Survey (USGS) quadrangle and surrounding eight quadrangles.

For those instances where potential impacts to sensitive biological resources may occur, SWCA has provided recommendations with the objective of avoiding or minimizing the potential impacts. SWCA understands that this BRA would be used by the applicant, the County of San Luis Obispo Planning and Building Department (County), and affected regulatory agencies during the environmental review process for the proposed project. This BRA has been prepared in accordance with the *Draft Standard Guidelines for Biological Resources Assessments* (County of San Luis Obispo 2016).

1.2 Project Location and Setting

The project site is located at 13350 River Road, San Miguel, San Luis Obispo County, California (Figure 1). The project site is located just southeast of the intersection of River Road and Cross Canyons Road and approximately 1 mile east of U.S. Route 101. The biological study area (BSA) for the project encompasses the entire 63-acre parcel (Assessor's Parcel Number [APN] 027-271-041). The BSA has historically been used for viticulture and includes roughly 43 acres of fallow agricultural field. Areas on the western and northern edge of the BSA have steep slopes and are dominated by blue oak woodland. One unnamed drainage runs along the northern edge of the BSA, within blue oak woodland habitat, forming a dry wash. Three steep ravines bisect the western half of the BSA forming dry washes within the blue oak woodland habitat. All washes drain via culvert under River Road and into the Salinas River. The Salinas River runs just west of the BSA, and the surrounding areas to the north, south, and east consist primarily of agricultural fields and residential property (Figures 1 and 2).

1.3 Project Description

The applicant proposes to conduct cannabis operations in three different areas on the 63-acre parcel. The proposed operations would consist of: (1) the outdoor cultivation of a total of 3 acres in hoop houses, located entirely within the eastern half of the fallow agricultural field; (2) an outdoor cannabis nursery consisting of approximately 6 acres, also located entirely within the eastern half of the fallow agricultural field; and (3) the utilization of the pre-existing 2,480-square-foot building for curing and drying, a small indoor nursery, and a virtual dispensary. Per the applicant, growing areas would not be located within any existing blue oak woodland habitat or other potential biologically sensitive portions of the site (i.e., the ravines that bisects the western half of the BSA and the dry wash on the northern edge of the BSA).

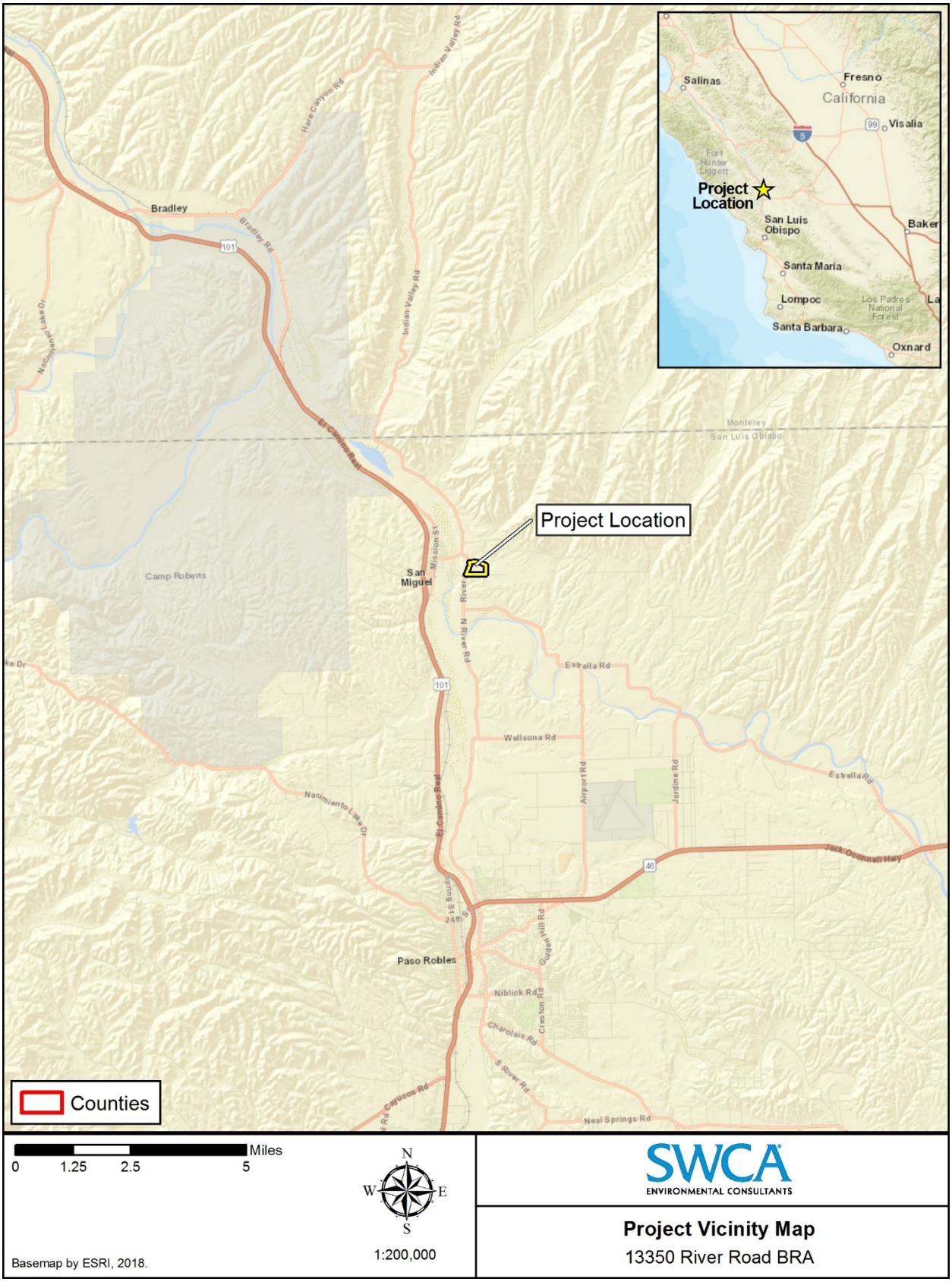

Figure 1. Project vicinity map.



Figure 2. Project location map.

1.4 Soils, Topography, and Elevation

According to the U.S. Department of Agriculture Natural Resources Conservation Service (NRCS) Web Soil Survey, soils in the BSA consist of Arbuckle-San Ysidro complex, 2 to 9 percent slopes and Arbuckle-Positas complex, 50 to 75 percent slopes (NRCS 2018). Arbuckle sandy loam was observed throughout the BSA. The topography of the BSA consists of steep slopes on the western and northern section and a relatively flat raised plain over the remainder of the BSA, bridging the top of the slopes. Elevation of the proposed project area ranges from approximately 650 to 760 feet above mean sea level.

2 METHODOLGY

2.1 Literature Review

Prior to conducting a field survey, SWCA conducted a literature review to gain insight on what species have known occurrences in the project vicinity. The review was initiated with a query of the most recent version of the California Department of Fish and Wildlife (CDFW) California Natural Diversity Database (CNDDB) to identify reported occurrences of sensitive resources known to occur in the Paso Robles 7.5-minute USGS quadrangle and the surrounding eight quadrangles: Estrella, Adelaida, Bradley, Ranchito Canyon, San Miguel, York Mountain, Templeton, and Creston (CNDDB 2018).

In addition to the CNDDB, the California Native Plant Society (CNPS) Electronic Inventory of Rare and Endangered Plants of California (CNPS 2018) was reviewed to provide additional information on rare plants that are known to occur in the area. Existing environmental documents and various reports prepared by SWCA were also reviewed for background information and recent findings information. An official list of special-status species and CNDDB mapped occurrences within 5 miles of the BSA are included in Appendix A, and lists of species observed are included as Appendix B. Photos of the BSA are included as Appendix C.

2.2 Field Survey

SWCA Biologist Ben Wagner conducted a reconnaissance-level field survey on May 8, 2018, within the blooming period for special-status plant species known to occur in the area. The purpose of the field survey was to characterize the existing conditions on and adjacent to the project site and identify those biological resources that could be impacted by future development on the project site. During the survey, SWCA inventoried botanical resources on the project site using dichotomous keys as necessary (Baldwin et al. 2012). The survey effort was conducted by foot, and plant and wildlife species observed were documented. Wildlife species were documented based on visual observation, auditory cues (i.e., calls and songs), and indirect signs (e.g., tracks, scat, skeletal remains, burrows, etc.). No protocol-level surveys for special-status species were performed as part of this study. A full floristic inventory of the property was not completed. Lists of plant and wildlife species observed onsite are included in Appendix C.

3 RESULTS

3.1 Habitat Types

The BSA encompasses approximately 63 acres of land composed of landscaped/developed areas, agricultural land, California annual grassland, blue oak woodland (Sawyer et al. 2009) (Figure 3; Appendix C).

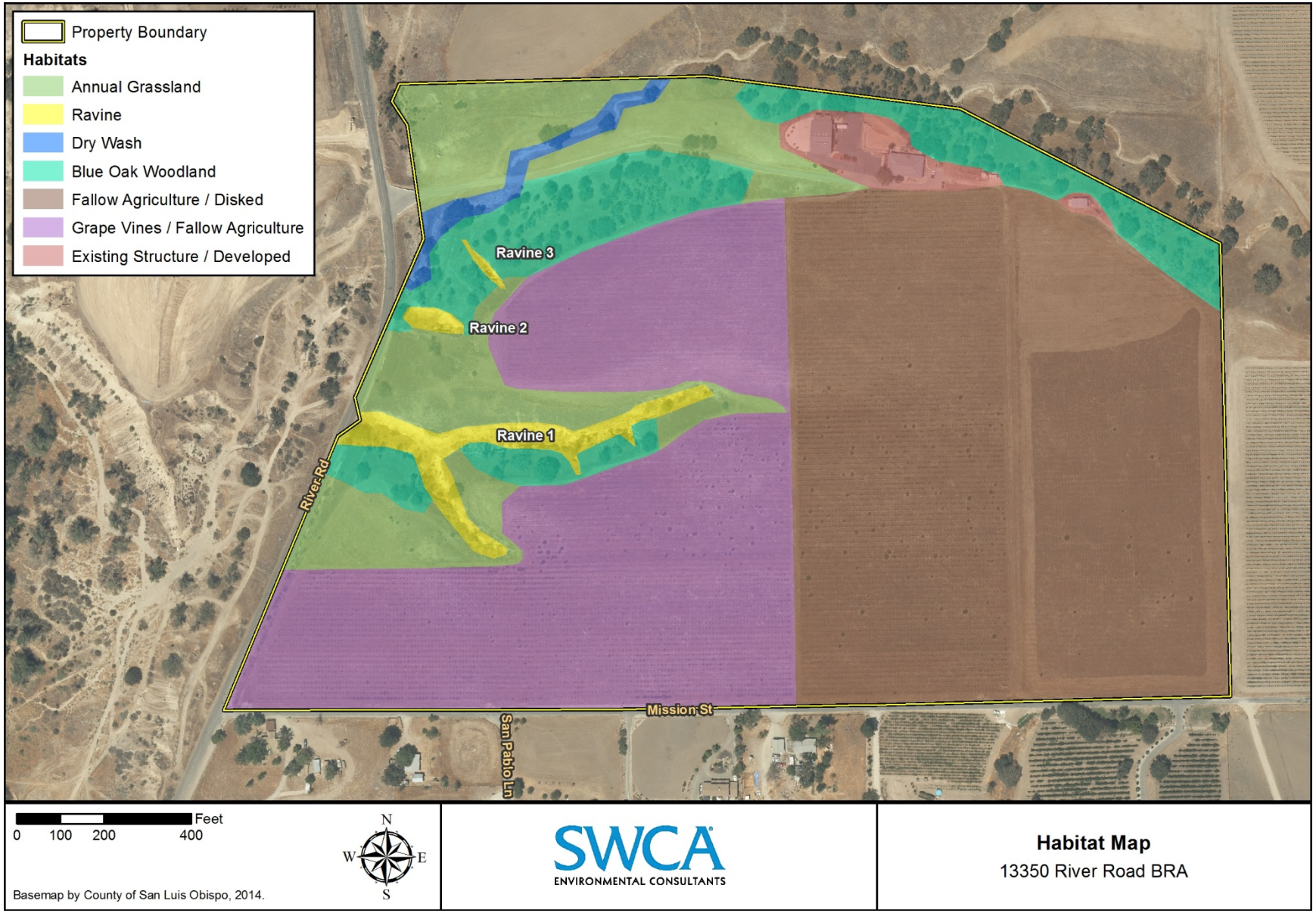

Figure 3. Habitat map.

3.1.1 Landscaped/Developed

Developed areas within the BSA include five structures, consisting of an office, the proposed indoor use building, a shade structure used to store agricultural equipment, a water tank, and a utility shed. There is a paved driveway that runs from the property gate on River Road to the proposed indoor use building and the office. There is a paved parking lot between the office and proposed indoor use building. The office and proposed indoor use building are surrounded by pavement and landscaping. Plants observed in landscaped/developed areas within the BSA included but were not limited to one London plane tree (*Platanus acerifolia*) in front of the office building and landscaping shrubs, including rosemary (*Rosmarinus officinalis*) and honeysuckle cultivars (*Lonicera* sp.), around and between the proposed indoor use building and parking lot.

Wildlife species observed in the landscaped/developed areas during the survey included Eurasian collared dove (*Streptopelia decaocto*) and house finch (*Haemorhous mexicanus*). It is important to recognize that landscaped/developed areas within the BSA can potentially provide suitable foraging and nesting habitat for various bird species during the nesting bird season and potential roosting habitat for bats (i.e., existing buildings) (see Figure 3; Appendix C: Photos C-8, C-9, C-12, and C-13).

3.1.2 Agricultural

Although technically not a habitat type, agricultural land was mapped during field surveys and was observed throughout a majority the BSA. Areas of agricultural land consist primarily of vineyard plantings and previously disked, fallow land. The area of past agricultural disturbance is entirely contained within a level area south of the landscaped/developed area and is divided into two fields. The field on the western half contains rows of fallow grape vines and is dominated by nonnative grasses and forbs (*Bromus* spp., *Avena* spp., and *Erodium* spp.). The field on the eastern half was observed to be recently disked and historically held rows of grape vines, which were recently removed (per land owner). It is also dominated by nonnative grasses and forbs (*Bromus* spp., *Avena* spp., and *Erodium* spp.). The proposed outdoor cannabis cultivation and nursery areas are located entirely within the recently disked eastern field (see Figure 3; Appendix C: Photos C-7 through C-12).

Plant diversity in the agricultural area was observed to be low from past cultivation practices. Vegetation observed included mostly nonnative grasses and forbs such as foxtail barley (*Hordeum murinum*), soft chess (*Bromus hordeaceus*), ripgut brome (*Bromus diandrus*), red brome (*Bromus madritensis* ssp. *rubens*), rattail fescue (*Festuca myuros*), and oats (*Avena* spp.). Nonnative forbs observed included red-stemmed filaree (*Erodium cicutarium*), sour clover (*Melilotus indica*), Maltese star thistle (*Centaurea melitensis*), and black mustard (*Brassica nigra*). Native plants observed within annual grassland included small-flowered fiddleneck (*Amsinckia menziesii*), annual lupine (*Lupinus bicolor*), dove weed (*Croton setigerus*), and valley popcorn flower (*Plagiobothrys canescens*).

3.1.3 California Annual Grassland

California annual grassland (Sawyer et al. 2009) or nonnative annual grassland (Holland 1986) was observed on the steeply sloped open areas of the BSA covering approximately 5 acres. Annual grasslands typically include a composition of both nonnative and native grasses. The proposed project area does not impact the annual grassland areas in the BSA. Annual grassland communities are often associated with numerous species of wildflowers, especially in years of favorable rainfall. Germination occurs with the onset of late fall rains and growth, flowering, and seed-set occurs from winter through spring. The plants typically die during the summer–fall dry season and persist as seeds until the growing season.

Annual grassland communities are common on the project site along the steeper slopes which have not been converted for agriculture. Dominant species in the grasslands include ripgut brome, red brome, and oats. Nonnative forbs observed include Maltese star thistle and black mustard. Native plants observed within annual grassland included small-flowered fiddleneck, annual lupine, and valley popcorn flower.

Annual grasslands on the project site may also provide foraging habitat for small mammals such white-footed mice (*Peromyscus* spp.), pocket mice (*Perognathus* spp.), Botta's pocket gopher (*Thomomys bottae*), and California ground squirrel (*Otospermophilus beecheyi*), as well as predators that feed on them, such as coyote (*Canis latrans*), and raptors (birds of prey), including red-tailed hawk (*Buteo jamaicensis*), red-shouldered hawk (*Buteo lineatus*), American kestrel (*Falco sparverius*), and great horned owl (*Bubo virginianus*) (see Figure 3; Appendix C: Photos C-5 and C-12)

3.1.4 Blue Oak Woodland

Blue oak woodland is a highly variable climax woodland dominated by blue oak (Q*uercus douglasii*), but usually including individuals of other oaks. Stands vary from open savannahs with grassy understories to fairly dense woodlands with shrubby understories. These habitats occur on well-drained soils in the Mediterranean California climate zone, usually below 3,000 to 4,000 feet elevation (Holland 1986). Associate species include manzanita (*Arctostaphylos* spp.), ceanothus (*Ceanothus* spp.), holly-leaf cherry (*Prunus ilicifolia*), and needlegrass (*Stipa* spp.).

Blue oak woodland (Sawyer et al. 2009) was observed within the BSA and is associated with the sloped areas on the western and northern sections of the parcel. Blue oak dominates this plant community forming an open to continuous canopy within and adjacent to the BSA. A few valley oak (*Quercus lobata*) individuals were observed within the blue oak woodland habitat on the western edge of the BSA. The groundcover consists of mostly nonnative Mediterranean grasses such as ripgut brome, slender wild oat (*Avena barbata*), and miscellaneous herbaceous annuals such as chick lupine (*Lupinus microcarpus*), hairy vetch (*Vicia villosa*), cream cups (*Platystemon californicus*), and Spanish lotus (*Acmispon americanus*). Coyote brush (*Baccharis pilularis*) and mule fat (*Baccharis salicifolia*) occur as sparse associate species in the dry wash areas within the blue oak woodland habitat (see Figure 3; Appendix C: Photos C-1, C-2, C-5, and C-13)

Blue oak woodland/savannah represents excellent habitat for a variety of wildlife species, including foraging habitat for various rodents, raccoon (*Procyon lotor*), skunk (*Mephitis mephitis*), coyote, red fox (*Vulpes vulpes*), gray fox (*Urocyon cinereoargenteus*), and mule deer (*Odocoileus hemionus*). Although no active nests were observed, trees and shrubs onsite have the potential to support nesting and foraging habitat for raptors (birds of prey) and a variety of perching birds. Species observed within the blue oak habitat in the BSA include acorn woodpecker (*Melanerpes formicivorus*), California quail (*Callipepla californica*), ash-throated flycatcher (*Myiarchus cinerascens*), Lawrence's goldfinch (*Spinus lawrencei*), California scrub jay (*Aphelocoma californica*), western fence lizard (*Sceloporus occidentalis*), coyote, ground squirrel, and cottontail rabbit (*Sylvilagus* sp.).

4 SPECIAL-STATUS SPECIES

The following describes those sensitive biotic resources that have been documented or identified as having the potential to occur within the Paso Robles 7.5-minute USGS topographic quadrangle and the surrounding eight quadrangles or have been documented within 5 miles of the BSA (Appendix A). Sensitive biotic resources include sensitive plant and/or animal species as described below.

4.1 Special-Status Plant Species

For the purposes of this section, special-status plant species are defined as the following:

- Plants listed or proposed for listing as threatened or endangered under the Federal Endangered Species Act (FESA) (50 Code of Federal Regulations [CFR] Section 17.12 for listed plants and various notices in the *Federal Register* for proposed species).
- Plants that are candidates for possible future listing as threatened or endangered under the FESA.
- Plants that meet the definitions of rare or endangered species under the California Environmental Quality Act (CEQA) (State CEQA Guidelines Section 15380).
- Plants considered by CNPS to be "rare, threatened, or endangered" in California (CNPS Ranks 1A, 1B, 2A, and 2B).
- Plants listed by CNPS as plants about which we need more information and plants of limited distribution (Ranks 3 and 4 in CNPS 2016).
- Plants listed or proposed for listing by the State of California as threatened or endangered under the California Endangered Species Act (CESA) (14 California Code of Regulations [CCR] Section 670.5).
- Plants listed under the California Native Plant Protection Act (California Fish and Game Code [CFGC] Section 1900 et seq.).
- Plants considered sensitive by other federal agencies (i.e., U.S. Forest Service, U.S. Bureau of Land Management), state and local agencies, or jurisdictions.

Based on the literature review for this project, a total of 28 special-status plant species have been documented in the Paso Robles 7.5-minute topographic quadrangle and the surrounding eight quadrangles (Table 1). Because the plant list presented in Table 1 is considered regional, SWCA evaluated the listed species to identify which special-status plant species have the potential to occur within the BSA. This analysis compared the known habitat requirements of those 28 species to the BSA's existing conditions, elevation, and soils. The evaluation also took into consideration which species occur within 5 miles of the BSA. It was determined that no special-status plant species have potential to occur within the BSA based on the existing conditions observed (Table 1).

Table 1. Special-Status Plant Species Evaluated for Potential Occurrence

Species Name	Habitat and Distribution	Flower Season	Legal Status Federal/State/ CNPS Rare Plant Rank	Rationale for Expecting Presence or Absence
Bristlecone fir *Abies bracteata*	Occurs in broadleafed upland forest, chaparral, lower montane coniferous forest, riparian woodland. Elevation: 183–1,555 meters.	N/A	--/--/1B.3	**Species Absent:** Suitable habitat absent. No record of species within 5 miles of the BSA. BSA is outside known range for species. Species not observed during survey.
Hoover's bent grass *Agrostis hooveri*	Occurs in sandy sites in chaparral, cismontane woodland, and valley and foothill grassland. 60–600 meters	April–July	--/--/1B.2	**Species Absent:** Grassland habitat with sandy soils present within BSA. However, there are no known occurrences of this species within 5 miles of the BSA. Species not observed during surveys conducted in appropriate blooming period.
oval-leaved snapdragon *Antirrhinum ovatum*	Occurs in chaparral, cismontane woodland, pinyon and juniper woodland, valley and foothill grassland; clay or gypsum, and often-alkaline soil. 200–1,000 meters	May–November	-- / -- / 4.2	**Species Absent:** Grassland was observed within the BSA. However, species not observed during survey in the appropriate blooming period.
Indian Valley spineflower *Aristocapsa insignis*	Occurs in foothill woodland on sandy soils. 300–600 meters.	May–September	--/--/1B.2	**Species Absent:** BSA is outside of known elevation range for species. Species not observed during survey conducted in appropriate blooming period.
dwarf calycadenia *Calycadenia villosa*	Occurs in chaparral, cismontane woodland, meadows and seeps, and valley and foothill grassland (rocky soils). 240–1,350 meters.	May–October	--/--/1B.1	**Species Absent:** Grassland habitat observed within the BSA. However, there are no known occurrences of this species within 5 miles of the BSA. Species not observed during survey conducted in appropriate blooming period.
La Panza mariposa lily *Calochortus simulans*	Chaparral, cismontane woodland, lower montane coniferous forest, and valley and foothill grassland (sandy, granitic, or serpentine). 395–1,100 meters.	April–May	--/--/1B.3	**Species Absent:** Grassland habitat observed within the BSA. However, there are no known occurrences of this species within 5 miles of the BSA. Species not observed during survey conducted in appropriate blooming period.
Hardham's evening-primrose *Camissoniopsis hardhamiae*	Annual herb; typically found in sandy, decomposed carbonate soils, especially in disturbed or burned areas among chaparral and cismontane woodland. 140–945 meters	March–May	-- / -- / 1B.2	**Species Absent:** Suitable habitat absent. No record of species within 5 miles of BSA. Species not observed during survey conducted in appropriate blooming period.
San Luis Obispo owl's-clover *Castilleja densiflora* var. *obispoensis*	Occurs in meadows and seeps, valley and foothill grassland (serpentinite). 10–430 meters.	March–May	--/--/1B.2	**Species Absent:** Suitable habitat absent. No record of species within 5 miles of the BSA. Species not observed during survey conducted in appropriate blooming period.

Species Name	Habitat and Distribution	Flower Season	Legal Status Federal/State/ CNPS Rare Plant Rank	Rationale for Expecting Presence or Absence
Lemmon's jewelflower *Caulanthus coulteri var. lemmonii*	Occurs on dry exposed slopes in pinyon and juniper woodland and valley and foothill grassland. 80–1220 meters	March–May	--/--/1B.2	**Species Absent:** Grassland habitat is present within the BSA. However, species not observed during survey conducted in appropriate blooming period.
purple amole *Chlorogalum purpureum* var. *purpureum*	Occurs in bulbiferous herb; occurs in chaparral, cismontane woodland, valley and foothill grassland on gravelly or clay soils. 205–350 meters	April–June	FT/--/1B.1	**Species Absent:** Grassland habitat is present in the BSA. However, there is no record of this species within 5 miles of the BSA. Species not observed during survey conducted in appropriate blooming period.
straight-awned spineflower *Chorizanthe rectispina*	Occurs in chaparral, cismontane woodland and coastal scrub. 85–1,035 meters.	April–July	--/--/1B.3	**Species Absent:** Suitable habitat absent. Species was not observed during survey conducted in appropriate blooming season.
Eastwood's larkspur *Delphinium parryi* ssp. *eastwoodiae*	Occurs in chaparral and valley and foothill grassland (serpentinite, coastal). 75–500 meters.	February–March	--/--/1B.2	**Species Absent:** Suitable habitat absent. No record of species within 5 miles of the BSA. Species not observed during survey conducted in appropriate blooming period.
umbrella larkspur *Delphinium umbraculorum*	Occurs in cismontane woodland. 400–1,600 meters.	April–June	--/--/1B.3	**Species Absent:** Suitable habitat absent. BSA outside of elevation range for this species. No record of species within 5 miles of the BSA. Species not observed during survey conducted in appropriate blooming period.
Koch's beard moss *Entosthodon kochii*	Moss; occurs in cismontane woodland. 180–1,000 meters.	N/A	--/--/1B.3	**Species Absent:** Suitable habitat absent. No records of the species within 5 miles of the BSA. Species not observed during survey.
yellow-flowered eriastrum *Eriastrum luteum*	Occurs in broadleafed upland forest, chaparral, and cismontane woodland (sandy or gravelly). 290–1,000 meters.	May–June	--/--/1B.2	**Species Absent:** Suitable habitat absent. BSA is outside of the known elevation range for this species. No records of this species within 5 miles of the BSA. Species not observed during survey conducted in appropriate blooming period.
mesa horkelia *Horkelia cuneata* var. *puberula*	Occurs in chaparral, cismontane woodland, and coastal scrub (sandy or gravelly).70–810 meters.	February–September	--/--/1B.1	**Species Absent:** Suitable habitat absent. There are no records of the species within 5 miles of the BSA. Species not observed during survey conducted in the appropriate blooming period.
Kellogg's horkelia *Horkelia cuneata* var. *sericea*	Occurs in closed-cone coniferous forest, chaparral (maritime), and coastal scrub (sandy or gravelly openings). 10–200 meters.	April–September	--/--/1B.1	**Species Absent:** Suitable habitat absent. BSA is outside the known elevation range for this species. Species not observed during survey conducted in appropriate blooming period.

Species Name	Habitat and Distribution	Flower Season	Legal Status Federal/State/ CNPS Rare Plant Rank	Rationale for Expecting Presence or Absence
Santa Lucia dwarf rush *Juncus luciensis*	Occurs in chaparral, Great Basin scrub, lower montane coniferous forest, meadows and seeps, and vernal pool. 300–2,040 meters.	April–July	-- / -- / 1B.2	**Species Absent:** Suitable habitat absent. Species not observed during survey conducted in appropriate blooming period
Jared's pepper-grass *Lepidium jaredii* ssp. *jaredii*	Occurs in valley and foothill grassland; alkaline, adobe soils. 335–1,005 meters.	March–May	--/--/1B.2	**Species Absent:** BSA is outside of the known elevation range for this species. Species not observed during survey conducted in the appropriate blooming period.
Davidson's bush-mallow *Malacothamnus davidsonii*	Perennial deciduous shrub; occurs in chaparral, cismontane woodland, coastal scrub, and riparian woodlands. 185–855 meters	June–January	--/--/1B.2	**Species Absent:** Suitable habitat absent. No species records within 5 miles of BSA. Species not observed in BSA during survey.
Carmel valley malacothrix *Malacothrix saxatilis* var. *arachnoidea*	Rhizomatous herb; occurs in chaparral and coastal scrub with rocky substrates. 25–1,036 meters	June–December	--/--/1B.2	**Species Absent:** Suitable habitat absent. No records of species within 5 miles of BSA. Species not observed during survey.
Oregon meconella *Meconella oregana*	Occurs in coastal prairie and coastal scrub. 250–620 meters.	March–April	--/--/1B.1	**Species Absent:** Suitable habitat absent. No record of species within 5 miles of BSA. Species not observed during survey.
woodland woollythreads *Monolopia gracilens*	Occurs in broadleafed upland forest, chaparral, lower montane coniferous forest, cismontane woodland, north coast coniferous forest, and valley and foothill grassland. 100–1,200 meters.	February–July	--/--/1B.2	**Species Absent:** Grassland habitat observed in the BSA. However, there are no records of species within 5 miles of the BSA. Species not observed during the appropriate blooming period.
spreading navarretia *Navarretia fossalis*	Annual herb; occurs in chenopod scrub, marshes and swamps (assorted shallow freshwater), playas, and vernal pools. 30–655 meters.	April–June	FT/--/1B.1	**Species Absent:** Suitable habitat absent. There are no known occurrences of this species within 5 miles of the BSA. Species not observed during survey conducted in the appropriate blooming period.
shining navarretia *Navarretia nigelliformis* ssp. *radians*	Occurs in cismontane woodland, valley and foothill grassland, and vernal pools. 76–1,000 meters.	April–July	--/--/1B.2	**Species Absent:** Grassland habitat was observed in the BSA. However, species not observed during survey conducted in appropriate blooming period.
prostrate vernal pool navarretia *Navarretia prostrata*	Annual herb; occurs in vernal pools and seeps among coastal scrub and valley and foothill grassland with alkaline soils. 15–1,210 meters.	April–July	--/--/1B.1	**Species Absent:** Suitable habitat absent. Species not observed during survey conducted in the appropriate blooming period.
hooked popcorn-flower *Plagiobothrys uncinatus*	Occurs in chaparral, cismontane woodland, and valley and foothill grassland with sandy soils. 300–760 meters.	April–May	--/--/1B.1	**Species Absent:** BSA is outside species known elevation range. Species not observed during survey conducted in appropriate blooming period.

Species Name	Habitat and Distribution	Flower Season	Legal Status Federal/State/ CNPS Rare Plant Rank	Rationale for Expecting Presence or Absence
Santa Cruz microseris *Stebbinsoseris decipiens*	Annual herb; occurs in broadleaf upland forest, closed-cone coniferous forest, chaparral, coastal prairie, coastal scrub, and alley and foothill grassland; associated with open areas; occasionally occurring in serpentinite. 10–500 meters.	April-May	--/--/1B.2	**Species Absent:** Grassland habitat was observed in the BSA. However, there are no records species within 5 miles of the BSA. Species not observed during survey conducted in appropriate blooming period.
Natural Communities of Concern				
Valley Oak Woodland	Highly variable climax woodland dominated by valley oak (*Quercus lobata*) usually below 6,000 meters. Occurs in the Sacramento and San Joaquin Valleys, and valleys of the Coast Ranges			**Absent:** Valley oak trees were observed within the blue oak woodland in the BSA. However, the habitat does not qualify as Valley Oak Woodland not having >50% relative cover in the tree canopy or >30% relative cover when other tree species are present (Sawyer et al. 2009).

General references: Baldwin, (2nd ed.) 2012. All plant descriptions paraphrased from CNPS 2016.

Status Codes:

-- = No status

Federal: **FE** = Federally Endangered; **FT** = Federally Threatened
State: **SE** = State Endangered; **ST** = State Threatened; **SR** = State Rare

California Native Plant Society (CNPS):
Rank 1B = rare, threatened, or endangered in California and elsewhere.
Rank 2 = rare, threatened, or endangered in California, but more common elsewhere.

Threat Code:

.1 = Seriously endangered in California (over 80% of occurrences threatened / high degree and immediacy of threat)
.2 = Fairly endangered in California (20-80% occurrences threatened)
.3 = Not very endangered in California (<20% of occurrences threatened or no current threats known)

4.2 Special-Status Animal Species

For the purposes of this section, special-status animal species are defined as the following:

- Animals listed or proposed for listing as threatened or endangered under the FESA (50 CFR 17.11 for listed animals and various notices in the *Federal Register* for proposed species).
- Animals that are candidates for possible future listing as threatened or endangered under the FESA.
- Animals that meet the definitions of rare or endangered species under CEQA (State CEQA Guidelines Section 15380).
- Animals listed or proposed for listing by the State of California as threatened and endangered under the CESA (14 CCR 670.5).
- Animal species of special concern to CDFW.
- Animal species that are fully protected in California (CFGC Sections 3511 [birds], 4700 [mammals], and 5050 [reptiles and amphibians]).

Based on a CNDDB query and a review of existing literature, a total of 29 sensitive wildlife species have been documented in the Paso Robles 7.5-minute USGS topographic quadrangle and the surrounding eight quadrangles as having the potential to occur within the BSA (Table 2). Because this list of species is considered regional, an analysis of the range and habitat preferences of those animal species was conducted to identify which sensitive wildlife species have the potential to occur within the BSA (Table 2).

Table 2. Special-Status Wildlife Species Investigated for Potential Occurrence

Species Name	Habitat and Distribution	Legal Status Federal/State/ Other Status	Rationale for Expecting Presence or Absence
Insects			
Crotch bumble bee *Bombus crotchii*	Occurs in Coast Range meadows. Nesting occurs underground as well as above ground in abandoned bird nests.	--/--/SA	**Species Absent – No Potential to Occur:** The BSA does not support suitable habitat for this species. No record of species within 5 miles of BSA. Species not expected to occur in the BSA. Species not observed during survey.
Brachiopods			
vernal pool fairy shrimp *Branchinecta lynchi*	Occur in vernal pool habitats including depressions in sandstone, to small swale, earth slump, or basalt-flow depressions with a grassy or, occasionally, muddy bottom in grassland (Eriksen and Belk 1999).	FT/--/--	**Species Absent – No Potential to Occur:** The BSA does not support suitable vernal pool habitat for this species.
Amphibians			
lesser slender salamander *Batrachoseps minor*	Habitat includes moist locations in forests of mixed oaks, sycamores, and bay laurel.	--/--/SSC	**Species Absent – No Potential to Occur:** Suitable moist habitat necessary to support this species is not present within the BSA. No record of species within 5 miles of BSA. Species not observed during survey.
California red-legged frog *Rana draytonii*	Occur in aquatic habitats with little or no flow and surface water depths to at least 2.3 feet. Presence of sturdy underwater supports such as cattails.	FT/--/SSC	**Species Absent – No Potential to Occur:** Suitable aquatic habitat necessary to support this species is not present within the BSA. No record of species within 5 miles of BSA. Species not observed during survey.
western spadefoot *Spea hammondii*	Inhabits vernal pools in primarily grassland, but also in valley and foothill hardwood woodlands.	--/--/SSC	**Species Absent – No Potential to Occur:** Vernal pool habitat necessary to support this species was not observed within the BSA. Species not observed during survey.
Coast Range newt *Taricha torosa torosa*	Breed in ponds, reservoirs, and slow-moving streams. Frequents terrestrial habitats such as oak woodlands.	--/--/SSC	**Species Absent – No Potential to Occur:** Suitable aquatic habitat necessary to support this species is not present within the BSA. No record of species within 5 miles of BSA. Species not observed during survey.
Reptiles			
California legless lizard *Anniella pulchra*	Occur in sandy or loose loamy soils under sparse vegetation. Soil moisture is essential. Prefer soils with high moisture content.	--/--/SSC	**Species Absent – Potential to Occur:** The appropriate sandy and loose loamy soils and vegetation necessary to support this species was observed within the BSA. Species not observed during survey.

Species Name	Habitat and Distribution	Legal Status Federal/State/ Other Status	Rationale for Expecting Presence or Absence
western pond turtle *Emys marmorata*	Occur in quiet waters of ponds, lakes, streams, and marshes. Typically in the deepest parts with an abundance of basking sites.	--/--/SSC	**Species Absent – No Potential to Occur:** Suitable aquatic habitat necessary to support this species is not present within the BSA. Species not observed during survey.
San Joaquin whipsnake *Masticophis flagellum ruddocki*	Ranges from Colusa County southward to the Grapevine in the Kern County portion of the San Joaquin Valley and westward into the inner South Coast Ranges. Occurs in open, dry, treeless areas, including grassland and saltbush scrub. Takes refuge in rodent burrows, under shaded vegetation and objects (California Herps 2018).	--/--/CSC	**Species Absent – Potential to Occur:** The grassland within the BSA could support this species. Species not observed during survey.
coast horned lizard *Phrynosoma blainvillii*	Frequents a wide variety of habitats; most commonly in lowlands along sandy washes with scattered low bushes.	--/--/SSC	**Species Absent – Potential to Occur:** The dry washes within the BSA could support this species. Species not observed during survey.
Birds			
tricolored blackbird *Agelaius tricolor*	(Nesting colony) requires open water, protected nesting substrate such as cattails or tall rushes, and foraging area with insect prey.	MBTA/--/SSC	**Species Absent – No Potential to Occur:** Suitable open water habitat not observed within the BSA. Species not observed during surveys.
golden eagle *Aquila chrysaetos*	(Nesting and nonbreeding/wintering) occur in rolling foothills, mountain areas, sage-juniper flats, and desert areas. Cliff-walled canyons provide nesting habitat in most parts of range; also, large trees in open areas.	MBTA/FP/--	**Species Absent – Low Potential to Occur:** Species has the potential to nest in oak trees found in the BSA. However, no established nests or individuals were observed during survey. No record of species within 5 miles of BSA.
great blue heron *Ardea herodias*	Common throughout most of California, in shallow estuaries and fresh and saline emergent wetlands. Less common along riverine and rocky marine shores, in croplands, pastures, and in mountains above foothills.	MBTA/--/--	**Species Absent – No Potential to Occur:** Suitable wetland habitat was not observed within the BSA. No record of species within 5 miles of BSA. Species not observed during survey.
burrowing owl *Athene cunicularia*	Occur in open, dry grasslands, deserts, and scrublands. Subterranean nester, dependent upon burrowing mammals.	MBTA/-- /CSC	**Species Absent – Low Potential to Occur:** Burrowing owl are known to only overwinter within San Luis Obispo County. Fallow agricultural field within BSA could potentially provide overwintering habitat for this species. Species not observed during survey.
ferruginous hawk *Buteo regalis*	(Wintering) open grasslands, sagebrush flats, desert scrub, low foothills, and fringes of pinyon-juniper habitats; eats lagomorphs, ground squirrels, and mice.	MBTA/--/--	**Species Absent – Low Potential to Occur:** The nonnative grassland within the BSA could support this species in the winter. Species not observed during survey.
Yellow warbler *Setophaga petechia*	Usually found in riparian deciduous habitats in summer. Stays among cottonwoods, willows, alders, and other small trees and shrubs. Nest is an open cup placed 2–16 feet above ground in a deciduous sapling or shrub.	--/--/CSC	**Species Absent – No Potential to Occur:** The BSA does not support suitable riparian habitat for this species. Species not observed during surveys.

Species Name	Habitat and Distribution	Legal Status Federal/State/ Other Status	Rationale for Expecting Presence or Absence
California horned lark *Eremophila alpestris actia*	Occurs in short grass prairies, coastal plains, fallow grain fields and alkali flats. Found in coastal regions from Sonoma to San Diego county, and west to the San Joaquin Valley.	MBTA/--/--	**Species Absent – Potential to Occur:** Annual grassland on site could support this species. No record of species within 5 miles of BSA. Species not observed during the survey.
Prairie falcon *Falco mexicanus*	Occurs in dry, open terrain that is level or hilly and breeds on cliffs.	MBTA/--/WL	**Species Absent – Potential to Occur:** Annual grassland on site could support this species. Species not observed during the survey.
Bald eagle *Haliaeetus leucocephalus*	Occurs along ocean shore, lake margins and rivers for both nesting and wintering. Most nests within 1 mile of water.	MBTA, BGEPA/SE/--	**Species Absent – No Potential to Occur:** Uncommon permanent resident. Suitable nesting habitat does not exist on the site. Species not observed during the surveys.
least Bell's vireo *Vireo bellii pusillus* (nesting)	(Nesting) summer resident of southern California in low riparian areas near water or river bottoms. Nests placed along margins of bushes or on twigs usually *Salix*, *Baccharis*, and mesquite.	FE, MBTA/SE/--	**Species Absent – No Potential to Occur:** BSA does not contain suitable nesting or foraging habitat. Species not observed during surveys.
other nesting birds Class Aves	Occur in various habitats (nesting).	MBTA/--/CDFW Code Section 3503	**Suitable Conditions Present:** Suitable foraging and nesting habitat for migratory birds is present within the BSA.
Mammals			
pallid bat *Antrozous pallidus*	Inhabits deserts, grasslands, shrublands, woodlands, and forests. Most common in open, dry habitats with rocky areas for roosting	--/--/SSC	**Species Absent – Low Potential to Occur:** The BSA supports suitable habitat for day roosts (trees and buildings) for this species.
Townsends big-eared bat *Corynorhinus townsendii*	Occurs in a wide variety of habitats; most common in mesic (wet) sites. May use trees for day and night roosts; however, requires caves, mines, rock faces, bridges or buildings for maternity roosts. Maternity roosts are in relatively warm sites.	--/--/SSC	**Species Absent – Low Potential to Occur:** The BSA supports suitable habitat for day roosts (trees and buildings) for this species.
Hoary bat *Lasiurus cinereus*	Occurs in open habitats and habitat mosaics with access to trees for cover. Roosts in dense foliage of medium to large trees.	--/SA/--	**Species Absent – Potential to Occur:** The site supports appropriate oak woodland habitat suitable for roosting. No record of species within 5 miles of BSA.
Monterey dusky-footed woodrat *Neotoma macrotis luciana*	Occurs in coastal central California in habitats that exhibit a moderate vegetative canopy, with a brushy understory. Builds nests of sticks and leaves at the base of, or within, a tree or shrub, or at the base of a hill. Primarily feeds on woody plants, but also eats fungi, flowers, grasses, and acorns.	--/--/SSC	**Species Absent – Potential to Occur:** Suitable habitat occurs site within the woody areas of the site; however, no woodrat middens or individuals were observed during survey of the BSA. No record of species within 5 miles of BSA.
Salinas pocket mouse *Perognathus inornatus psammophilus*	Annual grassland and desert shrub communities in the Salinas Valley in fine-textured, sandy, friable soils. Burrows for cover and nesting.	--/--/SSC	**Species Absent – Potential to Occur:** The BSA contains sandy washes suitable to support this species. Species not observed during survey.

Species Name	Habitat and Distribution	Legal Status Federal/State/ Other Status	Rationale for Expecting Presence or Absence
American badger *Taxidea taxus*	Drier open stages of shrub, forest, and herbaceous habitats, with friable soils; needs sufficient food and open, uncultivated ground; digs burrows.	--/--/SSC	**Species Absent – Potential to Occur:** This species, or evidence of this species, was not observed during survey.
San Joaquin kit fox *Vulpes macrotis mutica*	Historic range included most of San Joaquin Valley from San Joaquin County southward to southern Kern County (USFWS 1998). Currently occur in remaining native valley and foothill grasslands and saltbush scrub communities of valley floor and surrounding foothills from southern Kern County north to Merced County.	FE/ST/--	**Species Absent – Low Potential to Occur:** Species or evidence of species not observed during survey.

General references: Unless otherwise noted all habitat and distribution data provided by the CNDDB.

Status Codes

--= No status

Federal: FE = Federal Endangered; FT= Federal Threatened; FC= Federal Candidate; CH= Federal Critical Habitat; PCH= Proposed Federal Critical Habitat; MBTA= Protected by Federal Migratory Bird Treaty Act

State: SE= State Endangered; ST= State Threatened

California Department of Fish and Game: SSC= California Special Concern Species; FP= Fully Protected Species; SA= Not formally listed but included in CDFW "Special Animal" List.; WL=Watch List

5 IMPACT ASSESSMENT AND MITIGATION

This section focuses on identifying potential biological adverse impacts associated with the proposed cannabis-growing activities within the BSA. The emphasis is on determining the potential effects of the project on special-status species, habitats, and jurisdictional areas within the BSA. Adverse impacts could occur if project construction and/or future uses of the property would result in temporary or permanent modification to sensitive habitats, or to habitats occupied by special-status species. Where potential impacts to sensitive resources have been identified, measures for avoiding, minimizing, or mitigating adverse effects to these resources are recommended.

5.1 Sufficiency of Biological Data

The analysis of the BSA included a botanical survey conducted during the typical blooming period for plants that bloom in May and documented existing site conditions (i.e., soils, plant communities present, and elevation). Though only one botanical survey was conducted, it is SWCA's professional opinion that if proposed cannabis-growing operations are conducted in the fallow agricultural areas that have been disked, then impacts to special-status plant species are not expected. No additional surveys are recommended at this time.

Though no special-status wildlife species were observed, SWCA has provided recommendations for additional surveys to be conducted prior to project activities to avoid and minimize any potential impacts to special-status wildlife species.

No formal jurisdictional delineation was conducted as part of this study. However, as currently proposed these jurisdictional features (e.g., the three ravines and the unnamed drainage) will not be directly impacted by the project. However, recommendations have been included below to avoid any indirect impacts to these features.

5.2 Impacts

5.2.1 Project Effect on Unique or Special-Status Species or Their Habitats

5.2.1.1 PLANTS

No special-status plant species were observed during the botanical survey conducted in May 2018. As currently proposed, cannabis-growing operations would be limited to the fallow agricultural areas that have been disked previously (see Figure 3). Impacts to special-status plant species are not expected. The agricultural areas within the BSA that are regularly disturbed (e.g., disked or grape cultivation area) do not provide ideal conditions for special-status plants to occur.

5.2.1.2 WILDLIFE

SWCA determined that the following special-status animal species have potential to occur within the BSA: California legless lizard, San Joaquin whipsnake, coast horned lizard, roosting bats (i.e., pallid bat, Townsend's big-eared bat, and hoary bat), Monterey dusky-footed woodrat, Salinas pocket mouse, American badger, San Joaquin kit fox, golden eagle, burrowing owl, ferruginous hawk, California horned lark, prairie falcon, and nesting birds.

Although the species listed above may have the potential to occur within or adjacent to the BSA, none of these species were identified during the reconnaissance-level wildlife survey conducted by SWCA. The potential for these species to occur cannot be ruled out due to the transitory nature of these wildlife species.

5.2.2 Project Effect on Extent, Diversity, or Quality of Native or Other Important Vegetation

The proposed project would not result in permanent or temporary impacts to any native or other important vegetation if cannabis-growing activities are limited to previously disturbed areas (e.g., fallow agricultural land including areas that have been disked).

5.2.3 Project Effect on Wetland or Riparian Habitat

The proposed project will have no direct or indirect effect on wetland or riparian habitat if the appropriate Best Management Practices (e.g., straw wattles, gravel bags, silt fences, Environmental Sensitive Area/exclusion fencing) are installed and the appropriate setbacks from the unnamed drainage on the northern edge of the BSA and the ravines on the western edge of the BSA are established prior to cannabis-growing operations.

5.2.4 Project Effect on Movement of Resident or Migratory Fish or Wildlife Species, or Factors Which Could Hinder the Normal Activities of Wildlife

The proposed project will have no direct or indirect effect on the movement of resident or migratory fish and wildlife species if the appropriate predisturbance surveys are initiated prior to project implementation.

5.3 Mitigation Measures

Where potential impacts to sensitive resources have been identified, mitigating adverse effects to these resources is recommended.

BIO-1 The following measures are recommended to avoid and minimize potential impacts to roosting bat species should any existing buildings be demolished or altered.

a. Prior to demolition of existing buildings, a preconstruction survey should be conducted by a qualified biologist. If bats are found to be roosting, and bat exclusion is necessary, a Bat Exclusion Plan shall be submitted to the County of San Luis Obispo and California Department of Fish and Wildlife for approval prior to construction.

BIO-2 Best Management Practices (e.g., straw wattles, Environmental Sensitive Area/exclusion fencing, gravel bags, silt fencing, etc.) should be installed prior to the start of any cannabis-growing activities to avoid direct inadvertent impacts to the unnamed drainage on the northern edge and the ravines on the western edge of the Biological Survey Area. Best Management Practices should be installed to avoid any indirect impacts to these drainages that may occur from erosion/sedimentation.

BIO-3 Within 30 days prior to ground-disturbing activities, an environmental monitor shall conduct surveys for silvery legless lizards, San Joaquin whipsnake, and coast horned lizard in the

anticipated disturbance area. The surveyor should utilize hand search or cover board methods in areas of disturbance where sensitive reptiles are expected to be found (e.g., under shrubs, other vegetation, debris). If cover board methods are used, they should commence at least 30 days prior to the start of ground-disturbing activities. Hand search surveys should be completed immediately prior to and during disturbances to the vegetated areas. During vegetation-disturbing activities, the environmental monitor should walk behind the equipment to capture sensitive reptiles that are unearthed by the equipment. The surveyor should capture and relocate any reptiles observed during the survey effort. The captured individuals should be relocated from the construction area and placed in suitable habitat on the site but outside of the work area.

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APPENDIX A

Special-Status Species List and CNDDB Occurrences Maps

Selected Elements by Scientific Name

California Department of Fish and Wildlife

California Natural Diversity Database

Query Criteria: Quad IS (Paso Robles (3512066) OR Estrella (3512065) OR Adelaida (3512067) OR Bradley (3512077) OR Ranchito Canyon (3512075) OR San Miguel (3512076) OR York Mountain (3512057) OR Templeton (3512056) OR Creston (3512055))

Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
Abies bracteata bristlecone fir	PGPIN01030	None	None	G2G3	S2S3	1B.3
Agelaius tricolor tricolored blackbird	ABPBXB0020	None	Candidate Endangered	G2G3	S1S2	SSC
Agrostis hooveri Hoover's bent grass	PMPOA040M0	None	None	G2	S2	1B.2
Anniella pulchra northern California legless lizard	ARACC01020	None	None	G3	S3	SSC
Antirrhinum ovatum oval-leaved snapdragon	PDSCR2K010	None	None	G3	S3	4.2
Antrozous pallidus pallid bat	AMACC10010	None	None	G5	S3	SSC
Aquila chrysaetos golden eagle	ABNKC22010	None	None	G5	S3	FP
Ardea herodias great blue heron	ABNGA04010	None	None	G5	S4	
Aristocapsa insignis Indian Valley spineflower	PDPGN0U010	None	None	G1	S1	1B.2
Athene cunicularia burrowing owl	ABNSB10010	None	None	G4	S3	SSC
Batrachoseps minor lesser slender salamander	AAAAD02170	None	None	G1	S1	SSC
Bombus crotchii Crotch bumble bee	IIHYM24480	None	None	G3G4	S1S2	
Branchinecta lynchi vernal pool fairy shrimp	ICBRA03030	Threatened	None	G3	S3	
Buteo regalis ferruginous hawk	ABNKC19120	None	None	G4	S3S4	WL
Calochortus simulans La Panza mariposa-lily	PMLIL0D170	None	None	G2	S2	1B.3
Calycadenia villosa dwarf calycadenia	PDAST1P0B0	None	None	G3	S3	1B.1
Camissoniopsis hardhamiae Hardham's evening-primrose	PDONA030N0	None	None	G2	S2	1B.2
Castilleja densiflora var. obispoensis San Luis Obispo owl's-clover	PDSCR0D453	None	None	G5T2	S2	1B.2
Caulanthus lemmonii Lemmon's jewelflower	PDBRA0M0E0	None	None	G3	S3	1B.2

Selected Elements by Scientific Name

California Department of Fish and Wildlife

California Natural Diversity Database

Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
Chlorogalum purpureum var. purpureum Santa Lucia purple amole	PMLIL0G051	Threatened	None	G2T2	S2	1B.1
Chorizanthe rectispina straight-awned spineflower	PDPGN040N0	None	None	G2	S2	1B.3
Corynorhinus townsendii Townsend's big-eared bat	AMACC08010	None	None	G3G4	S2	SSC
Delphinium parryi ssp. eastwoodiae Eastwood's larkspur	PDRAN0B1B2	None	None	G4T2	S2	1B.2
Delphinium umbraculorum umbrella larkspur	PDRAN0B1W0	None	None	G3	S3	1B.3
Emys marmorata western pond turtle	ARAAD02030	None	None	G3G4	S3	SSC
Entosthodon kochii Koch's cord moss	NBMUS2P050	None	None	G1	S1	1B.3
Eremophila alpestris actia California horned lark	ABPAT02011	None	None	G5T4Q	S4	WL
Eriastrum luteum yellow-flowered eriastrum	PDPLM03080	None	None	G2	S2	1B.2
Falco mexicanus prairie falcon	ABNKD06090	None	None	G5	S4	WL
Haliaeetus leucocephalus bald eagle	ABNKC10010	Delisted	Endangered	G5	S3	FP
Horkelia cuneata var. puberula mesa horkelia	PDROS0W045	None	None	G4T1	S1	1B.1
Horkelia cuneata var. sericea Kellogg's horkelia	PDROS0W043	None	None	G4T1?	S1?	1B.1
Juncus luciensis Santa Lucia dwarf rush	PMJUN013J0	None	None	G3	S3	1B.2
Lasiurus cinereus hoary bat	AMACC05030	None	None	G5	S4	
Lepidium jaredii ssp. jaredii Jared's pepper-grass	PDBRA1M0G1	None	None	G2G3T1T2	S1S2	1B.2
Malacothamnus davidsonii Davidson's bush-mallow	PDMAL0Q040	None	None	G2	S2	1B.2
Malacothrix saxatilis var. arachnoidea Carmel Valley malacothrix	PDAST660C2	None	None	G5T2	S2	1B.2
Masticophis flagellum ruddocki San Joaquin coachwhip	ARADB21021	None	None	G5T2T3	S2?	SSC
Meconella oregana Oregon meconella	PDPAP0G030	None	None	G2G3	S2	1B.1
Monolopia gracilens woodland woollythreads	PDAST6G010	None	None	G3	S3	1B.2

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Selected Elements by Scientific Name

California Department of Fish and Wildlife

California Natural Diversity Database

Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
Navarretia fossalis spreading navarretia	PDPLM0C080	Threatened	None	G2	S2	1B.1
Navarretia nigelliformis ssp. radians shining navarretia	PDPLM0C0J2	None	None	G4T2	S2	1B.2
Navarretia prostrata prostrate vernal pool navarretia	PDPLM0C0Q0	None	None	G2	S2	1B.1
Neotoma macrotis luciana Monterey dusky-footed woodrat	AMAFF08083	None	None	G5T3	S3	SSC
Perognathus inornatus psammophilus Salinas pocket mouse	AMAFD01062	None	None	G4T2?	S1	SSC
Phrynosoma blainvillii coast horned lizard	ARACF12100	None	None	G3G4	S3S4	SSC
Plagiobothrys uncinatus hooked popcornflower	PDBOR0V170	None	None	G2	S2	1B.2
Polyphylla nubila Atascadero June beetle	IICOL68040	None	None	G1	S1	
Rana draytonii California red-legged frog	AAABH01022	Threatened	None	G2G3	S2S3	SSC
Setophaga petechia yellow warbler	ABPBX03010	None	None	G5	S3S4	SSC
Spea hammondii western spadefoot	AAABF02020	None	None	G3	S3	SSC
Stebbinsoseris decipiens Santa Cruz microseris	PDAST6E050	None	None	G2	S2	1B.2
Taricha torosa Coast Range newt	AAAAF02032	None	None	G4	S4	SSC
Taxidea taxus American badger	AMAJF04010	None	None	G5	S3	SSC
Trimerotropis occulens Lompoc grasshopper	IIORT36310	None	None	G1G2	S1S2	
Valley Oak Woodland Valley Oak Woodland	CTT71130CA	None	None	G3	S2.1	
Vireo bellii pusillus least Bell's vireo	ABPBW01114	Endangered	Endangered	G5T2	S2	
Vulpes macrotis mutica San Joaquin kit fox	AMAJA03041	Endangered	Threatened	G4T2	S2	

Record Count: 58

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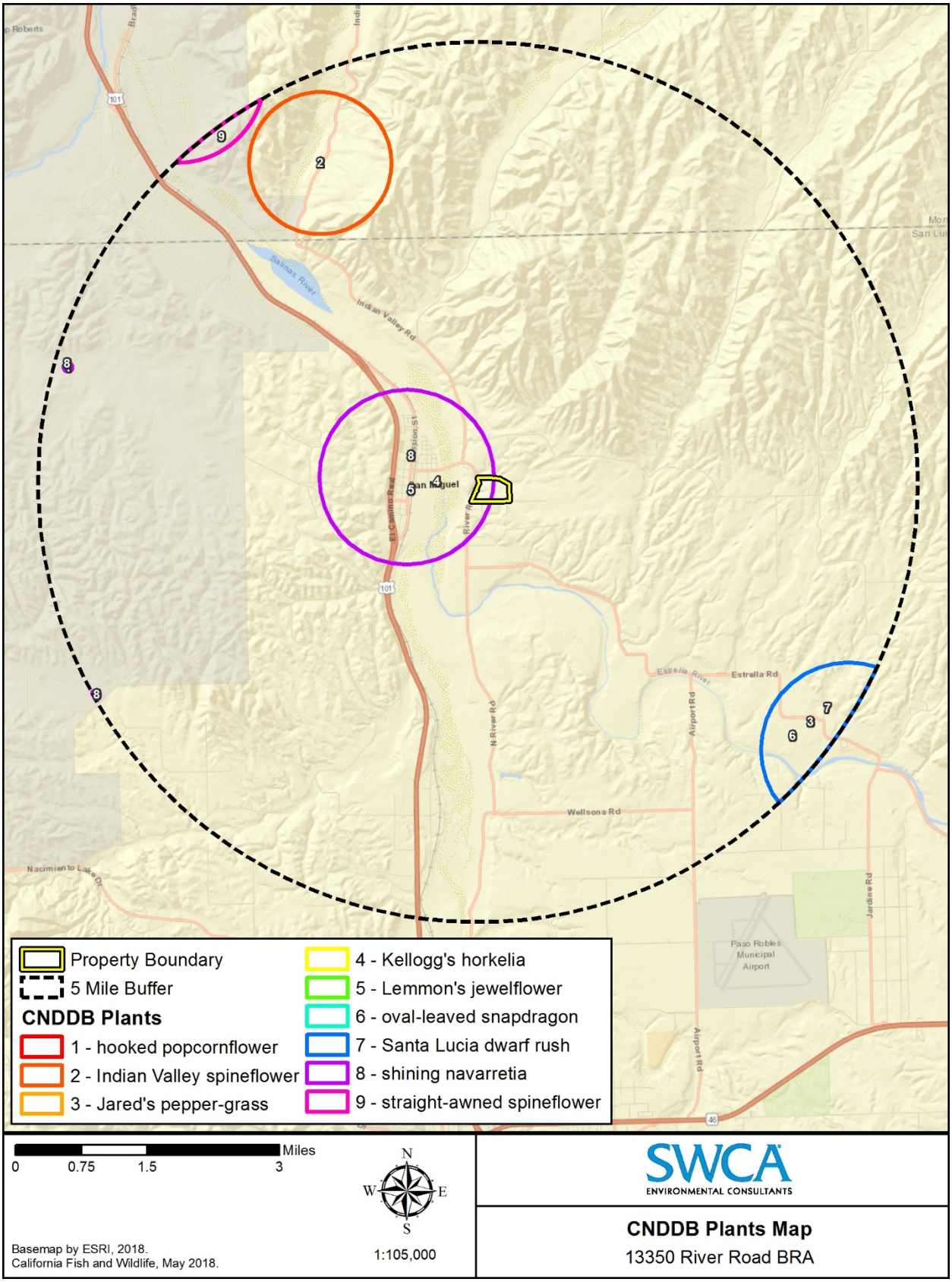

Figure A-1. CNDDB plant occurrences map.

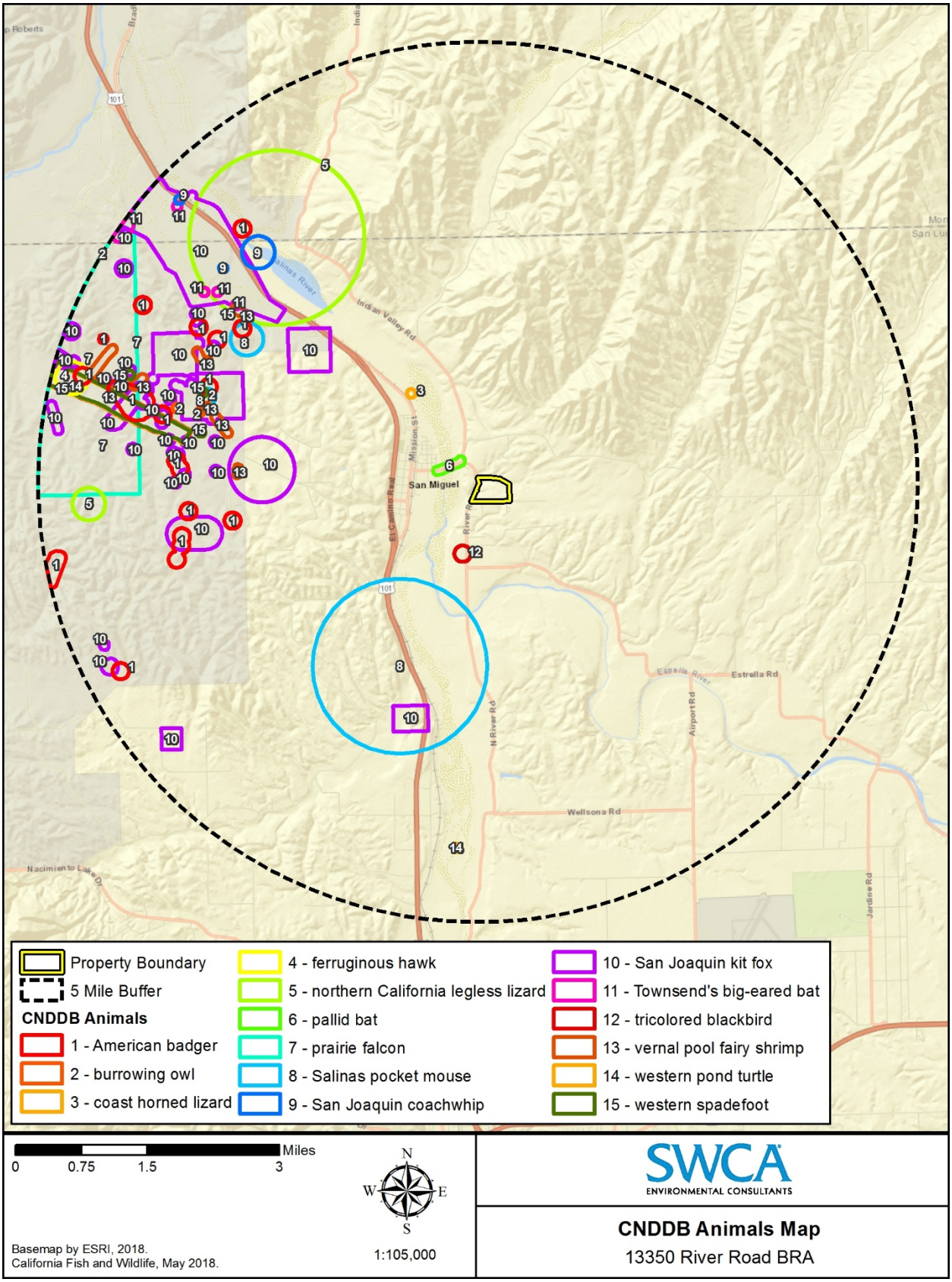

Figure A-1. CNDDB animal occurrences map.

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APPENDIX B

List of Species Observed Onsite

Table B-1. Observed Plant List

Scientific Name	Common Name	Native	Species Status / Notes
Vascular Plants nomenclature follows *The Jepson Manual* and http://ucjeps.berkeley.edu/interchange.html.			
ANGIOSPERMS (DICOTS)			
Amaranthaceae	**Amaranth family**		
Amaranthus albus	tumbleweed	No	
Asclepiadaceae	**Milkweed family**		
Asclepias fascicularis	narrow-leaf milkweed	Yes	
Asteraceae	**Sunflower family**		
Achillea millefolium	yarrow	Yes	
Ambrosia acanthicarpa	annual burweed	Yes	
Baccharis pilularis var. *consanguinea*	coyote brush	Yes	
Baccharis salicifolia	mule fat	Yes	
Carduus pycnocephalus	Italian thistle	No	Cal-IPC: Moderate
Centaurea melitensis	Maltese star thistle	No	Cal-IPC: Moderate
Erigeron canadensis	horseweed	Yes	
Heterotheca grandiflora	telegraph weed	Yes	
Hypochaeris glabra	smooth cat's ear	No	Cal-IPC: limited
Lactuca serriola	prickly lettuce	No	
Sonchus oleraceus	sow thistle	No	
Stebbinsoseris heterocarpa	grassland stebbinsoseris	Yes	
Stephanomeria sp.	Wire lettuce	na	No flower or fruit structures
Boraginaceae	**Borage family**		
Amsinckia menziesii	*Small-flowered fiddleneck*	*Yes*	
Heliotropium curassavicum	salt heliotrope	Yes	
Phacelia distans	common phacelia	Yes	
Plagiobothrys canescens	valley popcorn flower	Yes	
Brassicaceae	**Mustard family**		
Brassica nigra	black mustard	No	
Capsella bursa-pastoris	Shepherd's purse	No	
Hirschfeldia incana	summer mustard	No	
Lepidium latiflolium	perennial pepperweed	no	Cal-IPC: High
Sisymbrium orientale	Indian hedge mustard	No	
Caprifoliaceae	**Honeysuckle family**		
Lonicera sp.	honeysuckle cultivar	No	
Sambucus nigra	black elderberry	Yes	
Euphorbiaceae	**Spurge family**		
Croton setiger	doveweed/turkey mullein	Yes	

Scientific Name	Common Name	Native	Species Status / Notes
Fabaceae	**Pea family**		
Acmispon americanus	Spanish lotus	Yes	
Lupinus bicolor	miniature lupine	Yes	
Lupinus microcarpus	chick lupine	Yes	
Melilotus indica	sour clover	No	
Medicago polymorpha	bur clover	No	Cal-IPC: limited
Trifolium hirtum	rose clover	No	Cal-IPC: Moderate
Vicia villosa	hairy vetch	No	Invasive
Fagaceae	**Oak family**		
Quercus douglasii	blue oak	Yes	
Quercus lobata	valley oak	Yes	
Geraniaceae	**Geranium family**		
Erodium cicutarium	red-stemmed filaree	No	Cal-IPC: limited
Erodium brachycarpum	White stemmed filaree	No	
Lamiaceae	**Mint family**		
Rosmarinus officinalis	rosemary	No	
Onagraceae	**Evening primrose family**		
Clarkia affinis	chaparral fairyfan	Yes	
Castilleja exserta ssp. *exserta*	purple owl's clover	Yes	
Papaveraceae	**Poppy family**		
Eschscholzia californica	California poppy	Yes	
Platystemon californicus	Cream cups	Yes	
Rubiaceae	**Madder family**		
Galium parisiense	Wall bedstraw	No	
Salicaceae	**Willow family**		
Salix laevigata	red willow	Yes	
Solanaceae	**Nightshade family**		
Datura wrightii	jimson weed	Yes	
Nicotiana glauca	tree tobacco	No	Invasive
Solanum umbelliferum	bluewitch nightshade	Yes	
Viscaceae	**Mistletow family**		
Phoradendron leucarpum ssp. *tomentosum*	oak mistletoe	Yes	
Vitaceae	**Grape family**		
Vitis vinifera	*cultivated grape*	*No*	
ANGIOSPERMS (MONOCOTS)			
Poaceae	**Grass family**		
Avena barbata	slender wild oats	No	Cal-IPC: moderate
Avena fatua	wild oats	No	
Bromus diandrus	ripgut brome	No	Cal-IPC: moderate

Scientific Name	Common Name	Native	Species Status / Notes
Bromus hordeaceus	soft chess brome	No	Cal-IPC: limited
Bromus rubens	red brome	No	
Festuca myuros	rattail fescue	No	Cal-IPC: moderate
Hordeum murinum	foxtail	No	
Stipa pulchra	purple needle-grass	Yes	
Themidaceae	**Brodiaea family**		
Dichelostemma capitatum	blue dicks	Yes	

Table B-2. Observed Wildlife List

Scientific Name	Common Name	Notes
BIRDS		
Upland Game Birds		
Callipepla californica	California quail	
Pigeons and Doves		
Streptopelia decaocto	Eurasian colored dove	
Woodpeckers		
Melanerpes formicivorus	acorn woodpecker	
Tyrant Flycatchers		
Myiarchus cinerascens	ash-throated flycatcher	
Jays, Crows, and Allies		
Aphelocoma californica	California scrub jay	
Mimids		
Mimus polyglottos	northern mockingbird	
Waxwings, silky-flycatchers, and Starlings		
Sturnus vulgaris	European starling	
Icterids		
Sturnella neglecta	western meadowlark	
Finches and Old World Sparrows		
Carpodacus mexicanus	house finch	
Carduelis lawrencei	Lawrence's goldfinch	
MAMMALS		
Canidae		
Canis latrans	coyote	Individual walking across driveway; scat; burrow
Lagomorphs		
Sylvilagus bachmanii	brush rabbit	
Rodents		
Otospermophilus beecheyi	California ground squirrel	
Thomomys bottae	Botta's pocket gopher	burrows
REPTILES		
Sceloporus occidentalis	western fence lizard	

APPENDIX C

Photo Documentation



Photo C-1. View of property entrance off River Road taken within the BSA. The ravine eventually confluences with the Salinas River through a culvert under River Road. The driveway leads to the proposed project area. Photo taken May 8, 2018.



Photo C-2. View of Ravine #2 and River Road taken from within the BSA. The ravine drains to the north and eventually confluences with the Salinas River through culvert under River Road. Photo taken May 8, 2018.

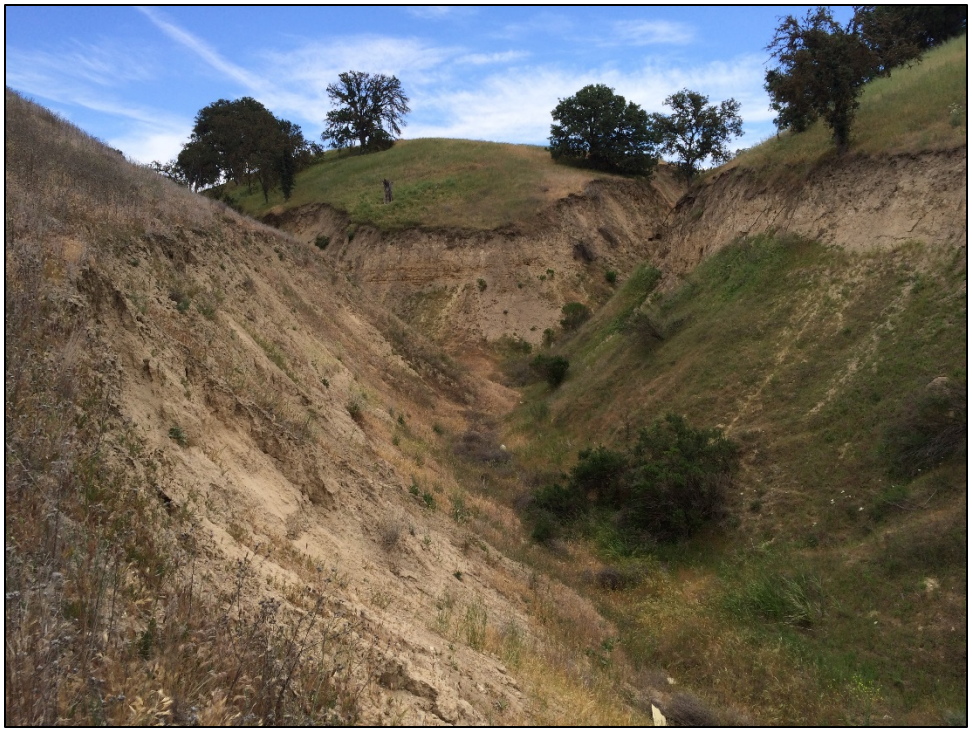

Photo C-3. View of Ravine #1 taken from the western edge of the BSA. The ravine eventually confluences with the Salinas River through a culvert under River Road. Note the steep slopes with open canopy of blue oak woodland. Photo taken May 8, 2018.



Photo C-4. View of Ravine #1 and drainage culvert, which runs under River Road and eventually confluences with the Salinas River. Photo taken May 8, 2018.



Photo C-5. View of Ravine #1 facing east. Note the steep slopes with open canopy blue oak woodland and the fallow agricultural field with grape row crops at the top of the slope. Photo taken May 8, 2018.



Photo C-6. View of the top of Ravine #1 facing east. Note fallow agricultural field with grape row crops at the top of the slope. Photo taken May 8, 2018.



Photo C-7. View of the top of the fallow agricultural field facing west. Note the top of Ravine #1 in the center of the picture and the fallow grape row crops to the north and south. Photo taken May 8, 2018.



Photo C-8. View of the pre-existing buildings taken from the approximate proposed location of the outdoor nursery area. Photo taken May 8, 2018.



Photo C-9. View of the proposed location of the outdoor cultivation area and pre-existing buildings (background) looking north. Photo taken May 8, 2018.



Photo C-10. View of the fallow agricultural field taken from the approximate location of the proposed outdoor cultivation area looking south. Photo taken May 8, 2018.



Photo C-11. View of the southern boundary of the BSA facing west. Note Mission Lane on the left side of the photo. Photo taken May 8, 2018.



Photo C-12. View of the driveway and proposed access route to the proposed indoor use area, outdoor nursery, and outdoor cultivation area. Note the fallow agricultural field to the left and the pre-existing building to the right. The pre-existing building to the right is the proposed indoor use area. Photo taken May 8, 2018.



Photo C-13. View of the steep slope and blue oak woodland habitat to the right and the fallow agricultural field to the left. Note the utility shed, water tank, and office building in the background. Photo taken May 8, 2018.

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