Biological Assessment
Los Alamos Road Project
Unincorporated Sonoma County, California

Prepared for:

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INTRODUCTION

All Cali Farms – Lisa Lai, is proposing to expand an existing cannabis cultivation and production facility she owns at 2000 Los Alamos Road east of the City of Santa Rosa, California, unincorporated Sonoma County, California. Mrs. Lai retained the services of Synthesis Planning to conduct a biological survey and assessment of the proposed project site and buffer area for submittal to applicable local permitting agencies.

Synthesis Planning conducted a biological survey of the proposed project site and buffer area to identify known or potential habitat for special-status wildlife and plant species on September 20, 2017. This report presents the results of our biological survey and includes recommendations for avoidance, minimization, and mitigation measures to be implemented during the proposed project to avoid or minimize potential impacts to sensitive wildlife and plant species.

PROJECT LOCATION AND SETTING

The proposed project site is located in central Sonoma County, California (see Figure 1). The proposed project site is located in Section 1, Township 7 North, Range 7 West, MDBM of the U.S. Geological Survey [USGS] Kenwood 7.5-minute quadrangle map. Figures 1 and 2 depict the location of the proposed project site. The proposed project site is located in areas of ruderal disturbed habitat, cismontane woodland habitat areas, and a foothill grassland habitat area.

The term "project site" is used to define the project footprint (i.e. proposed greenhouse structures, existing access routes, proposed access routes, etc.). The term "buffer area" is defined as the circular area with a radius of 500 feet surrounding the proposed project site and is included in the biological survey area. Representative photographs of the proposed project node locations and buffer areas are presented in Appendix A.

Habitat Conservation and Natural Community Conservation Plans – There are no adopted Habitat Conservation Plans, Natural Community Conservation Plans or other approved local, regional, or State habitat conservation plans covering the proposed project site.

PROJECT DESCRIPTION

Mrs. Lai is proposing to expand an existing cannabis growing facility she owns and operates at 2000 Los Alamos Road, east of the City of Santa Rosa, in unincorporated Sonoma County, California. Existing indoor growing and production areas total approximately 3,000 square feet, or 0.07 acres. Under the proposed expansion plan, the indoor cultivation and production area would be expanded by approximately 2,850 square feet, or 0.06 acres. Under the expanded plan, the indoor cultivation and production facility would utilize 5,850 square feet, or 0.13 acres.

In order to expand the cultivation and production site, the new areas proposed for development would need to be cleared of trees and brush. The first step in clearing existing vegetation will involve workers using chainsaws and handsaws to remove the vegetation. Trees and brush materials will be cut up, and placed at the edges of the new cultivation/production areas. After above ground removal of woody vegetative material is achieved, a backhoe will be used to grub tree stumps, and shrub stumps and roots, from the ground. The next step will involve using a backhoe to re-contour the area into terraced flat areas onto which two (2) new concrete pads and

two (2) new green houses will be placed for cannabis cultivation, as well as to expand the existing parking to accommodate ADA accessible parking and passenger loading zone. Sloped areas of the graded areas will be seeded with a Sonoma County approved native grass seed mix to stabilize slopes and avoid runoff of sediment into adjacent cismontane woodland habitat, and non-native foothill grassland habitat. No new roadways will be required as part of the proposed project.

The location of the proposed project is illustrated on the attached Project Vicinity (Figure 1) and Location (see Figures 2) maps.

Project Schedule

Construction is expected to begin after all required regulatory permits are secured. Project activities are expected to be complete in approximately 30 days, or one (1) month.

SURVEY METHODOLOGIES

A literature review was completed and field surveys were conducted to identify special-status plant and wildlife species, as well as sensitive habitats that could be potentially present within the proposed project site and buffer area. The following sections describe the survey methods that were used and the literature and databases that were reviewed prior to conducting biological surveys.

Literature Review: Prior to conducting biological surveys for the proposed project site and buffer area and during the preparation of this biological assessment, we reviewed Synthesis Planning data files and records from the following sources:

- United States Fish and Wildlife Service (USFWS) Sacramento Office online electronic database of threatened and endangered species (USFWS 2017a);

- United States Fish and Wildlife Service (USFWS) Environmental Conservation Online System (ECOS) Critical Habitat Portal (USFWS 2017b);

- California Department of Fish and Wildlife (CDFW) California Natural Diversity Database (CNDDB) RareFind 5 and Biological Information and Observation System (BIOS) (CDFW 2017);

- California Native Plant Society's (CNPS) online *Inventory of Rare and Endangered Vascular Plants of California, 8th Edition* (CNPS 2017).

From each review, a list of special-status species was generated for species that occur in or may be affected by projects in the Kenwood USGS 7.5-minute quadrangle. Special-status species that potentially occur in this quadrangle (an area measuring approximately 70 square miles) are identified in Table 1. Each of the species identified in the database queries was evaluated in terms of its likelihood to occur within the project site and buffer area (see Table 1). This evaluation considered the known distribution and habitat requirements of the species and the following findings were prepared:

- Known to Occur – species was observed within or adjacent to the project site or buffer area during biological surveys or has previously been documented within or immediately

adjacent to the project site or buffer area.

- Potentially Present – species has not been documented within or immediately adjacent to the project site or buffer area, but should be expected in areas of suitable habitat on and near the project site and buffer area during the appropriate season and time of day.

- Low Potential – species has not been documented within or immediately adjacent to the project site or buffer area, nor is it likely to occur on or near the project site or buffer area, but its presence cannot be completely discounted due to incomplete information on the taxon's distribution or habitat requirements.

- No Potential – species does not occur within or immediately adjacent to the project site or buffer area due to the lack of required habitat features for the species, or the known range of the species is well defined and does not include the project vicinity.

Sources consulted for information on distribution of special-status wildlife species, as well as local and regional sensitive fauna include but are not limited to Remsen 1978 [birds], Williams 1986 [mammals], Jennings and Hayes 1994 [reptiles and amphibians], and Moyle *et al*. 1989 [fish]. All sources consulted during the preparation of this document are listed in the *Literature Cited and References Consulted* section at the end of this report.

Special-Status Species - Special-status species are those taxa that are legally protected under the State or Federal Endangered Species Act (ESAs) or other regulations and considered sufficiently rare by the scientific community to qualify for such listing. Special-status plants and animals generally fall into one or more of the following categories:

- Plants or animals listed or proposed for listing as Threatened or Endangered under the Federal ESA (50 Code of Federal Regulations [CFR] 17.12 [listed plants], 1711 [listed animal] and various notices in the Federal Register [FR][proposed species]);

- Plants or animals that are candidates for possible future listing as Threatened or Endangered under the Federal ESA (61 FR 40);

- Plants or animals listed or proposed for listing by the State of California as Threatened or Endangered under the California ESA (14 California Code of Regulations [CCR] 670.5);

- Animal Species of Special Concern to the CDFW (CDFW 2017);

- Animals Fully Protected in California (California Fish and Game Code, Sections 3511 [birds], 4700 [mammals], and 5050 [reptiles and amphibians]);

- Plants listed as California Rare Plant Rank (CRPR) 1A (former CNPS List 1A) are presumed extinct in California (CNPS 2017);

- Plants listed as CRPR 1B (former CNPS List 1B) are considered rare, threatened, or endangered in California or elsewhere (CNPS 2017);

- Plants listed as CRPR 2A (former CRPR 1A) are presumed extirpated in California, but more common elsewhere (CNPS 2017);

- Plants listed as CRPR 2B (former CRPR 1B) are considered rare or endangered in California, but more common elsewhere (CNPS 2017);

- Plants identified as CRPR Rank 3 (former CNPS List 3) are those for which more information is needed; a review list (CNPS 2017); and

- Plants listed as CRPR Rank 4 (former CNPS List 4) are of limited distribution; a watch list (CNPS 2017) – these taxa may be included as special-status species on the basis of local significance or recent biological information.

SENSITIVE WILDLIFE SPECIES SURVEYS

We surveyed the proposed project site and a buffer area with a 500-foot radius around the proposed project site for sensitive wildlife, special-status plant species, and their habitats on September 20, 2017. Animal species observed during biological surveys are listed in Table 2. Plant species identified are discussed in the text of the report. Species with potential to occur in the proposed project site based on known and historic occurrences in the CNDDB are discussed in text. Based on current site conditions, those species identified in Table 1 as having no potential to occur in the project site and buffer area are not discussed further in this document.

We used portions of standard agency approved methods to survey for special-status wildlife species. Surveys were conducted to identify the following:

- Suitability of habitat(s) to support special-status wildlife species
- Sightings, burrows, and "sign" of sensitive small mammal species
- Sightings and "sign" of other sensitive avian species
- Presence of suitable nesting, roosting, and/or foraging habitat for migratory and other sensitive avian species
- Vegetation association, habitat types, and special-status plant species
- Dominant plant canopy and ground cover species
- Habitat condition and quality
- On-site, adjacent, and surrounding land uses.

We conducted surveys by walking parallel meandering transects spaced at 30 foot intervals to identify special-status wildlife species. Presence of these species was confirmed by direct observation or by identification of "sign" (e.g., tracks, scat, dens and/or burrows, etc.) unique to a particular species.

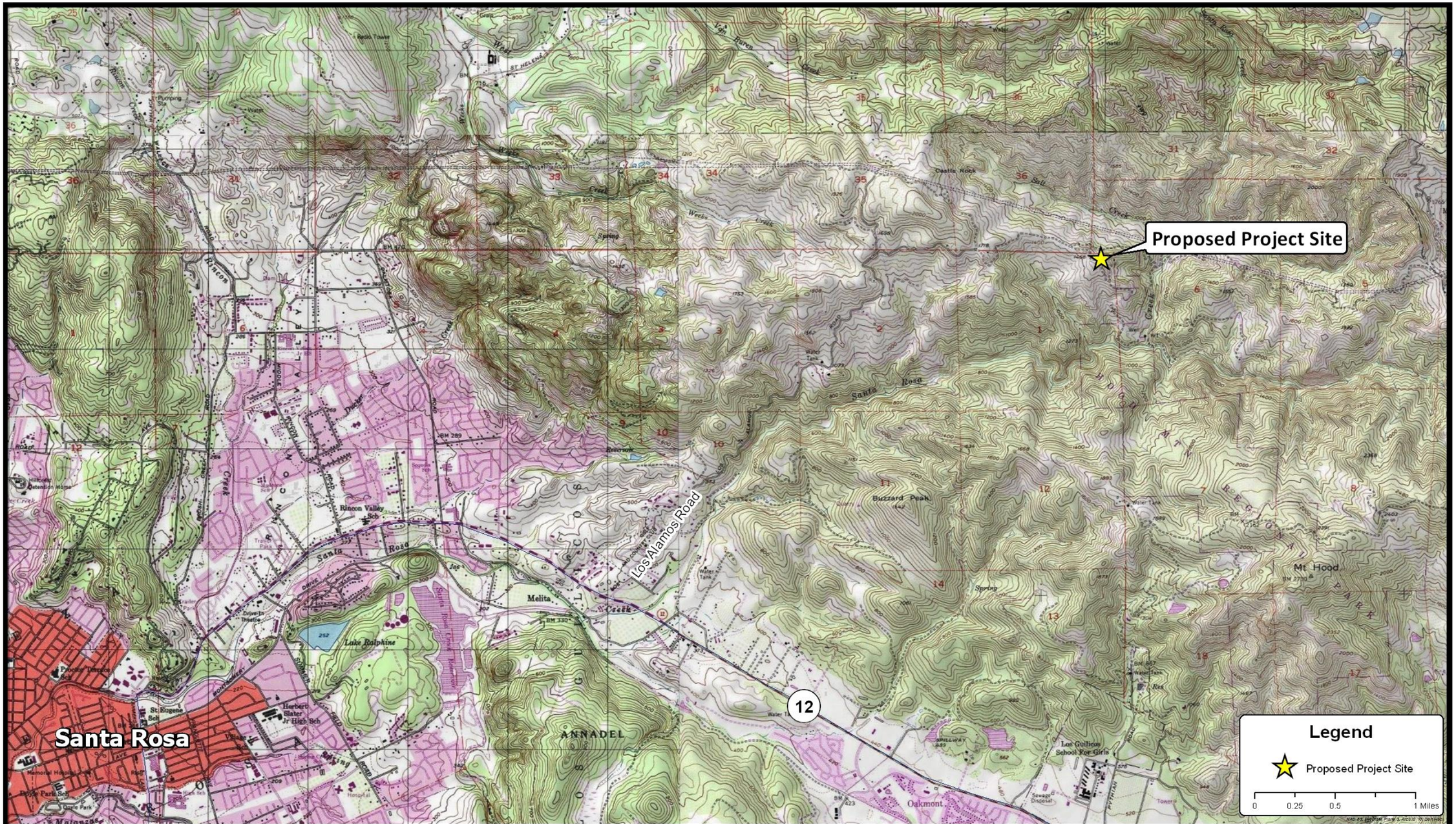

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FIGURE 1

Project Vicinity Map

Joe Henderson
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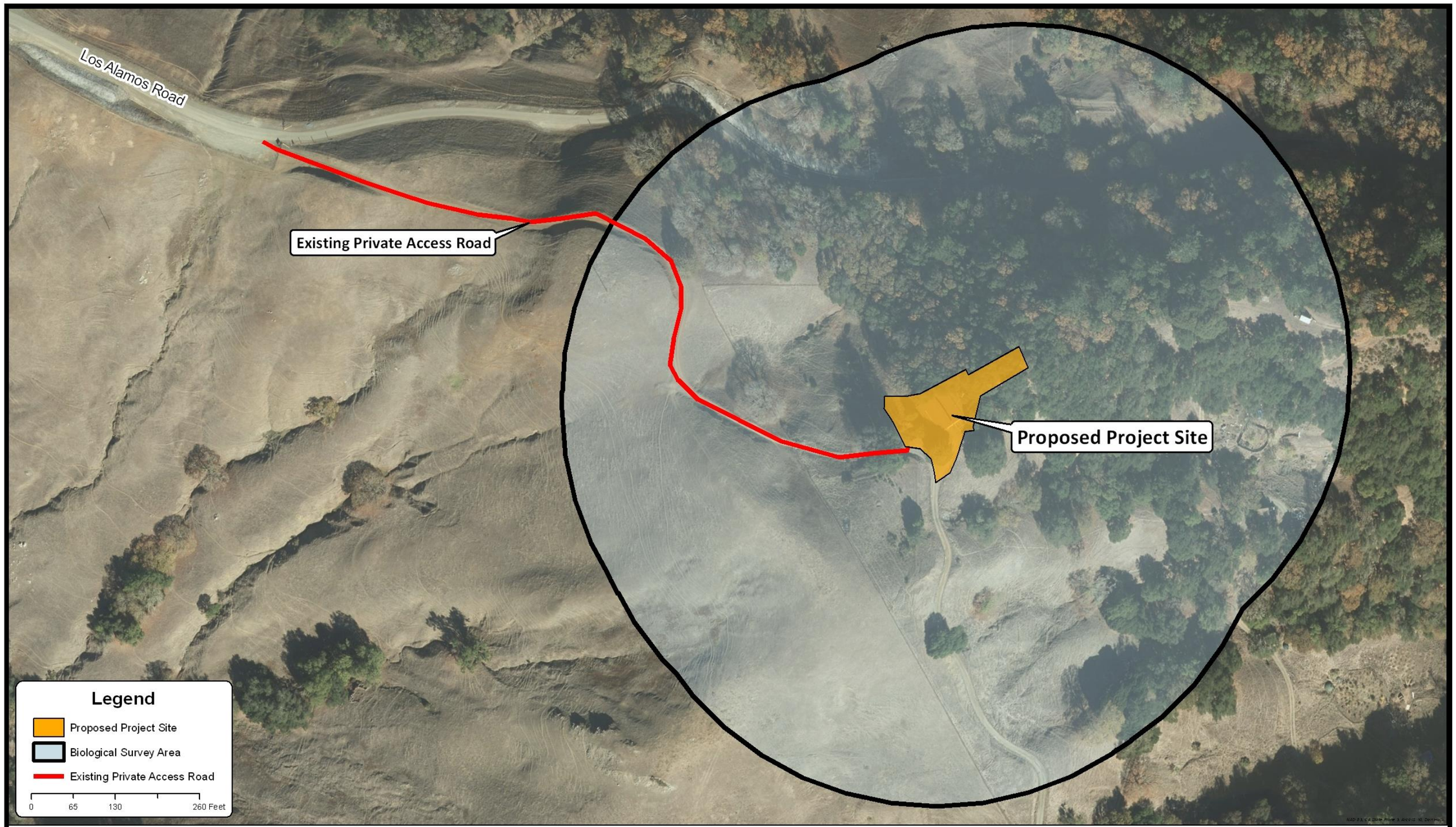

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FIGURE 2

Project Location Map

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Table 1
Special-Status Species Potentially Occurring in the Proposed Project Site and Buffer Area

Common Name	Scientific Name	Federal Status	State Status	Habitat/Observances	Potential to Occur on Project Site and Buffer Area
Birds					
Northern spotted owl	*Strix occidentalis caurina*	FT	CT	Northern spotted owls are very territorial and intolerant of habitat disturbance. They prefer old-growth forests with tree canopies that are high and open enough for the owls to fly between and underneath the trees. Preferred areas have large trees with broken tops, deformed limbs or large holes used as nesting sites. Each pair needs a large amount of land for hunting and nesting, and although they do not migrate, spotted owls may shift their ranges in response to seasonal changes that make hunting difficult.	No Potential. Based on habitat disturbance in the general project area and the presence of rural residences, this species is not expected to be present in the project site or general project area. This species has not been documented as occurring in the project area (see Figure 3) (CDFW 2017).
Mammals					
Pallid bat	*Antrozous pallidus*	-	CSC	Found in deserts, grasslands, shrublands, woodlands, and forests. Most common in dry habitats with rocky areas for roosting. Roosts must protect bats from high temperatures. Very sensitive to disturbance of roosting sites.	Potentially present. May forage intermittently within the project site and buffer area. Roosting habitat was observed within the project site and buffer area. No individual pallid bats observed in the proposed project site or buffer area during surveys. This species has not been documented as occurring in the project area (see Figure 3) (CDFW 2017).
Invertebrates					
California freshwater shrimp	*Syncaris pacifica*	FE	CE	Endemic to Marin, Napa, and Sonoma Counties. Found in low elevation, low gradient streams where riparian cover is moderate to heavy. Found in shallow pools away from main stream flow. In winter, found near undercut banks with exposed roots. In summer, found near leafy branches touching water.	No Potential. No potential habitat suitable for this species was observed within the proposed project site or buffer area.
Amphibians and Reptiles					
California giant salamander	*Dicamptodon ensatus*	-	CSC	The Pacific giant salamander is found in a variety of aquatic habitats, including lakes, ponds, rivers, and streams. They prefer fast moving water to slow moving water. Cover is another vital characteristic of	Potentially present. Potential aestivation habitat for this species was observed within the proposed project site and buffer area. No potential aquatic breeding habitat was

				this Salamander's habitat. Cover is used for hiding, protection from the sun, and brooding eggs.	observed within the proposed project site or buffer area. No potential aestivation burrow sites were observed within the project site or buffer area during biological surveys. No sign of this species was observed during biological surveys. This species has been documented approximately 1.00 miles southwest of the proposed project site. (CDFW 2017) (see Figure 3).
Western pond turtle	*Emys marmorata*	-	CSC	A thoroughly aquatic turtle of ponds, marshes, rivers, streams, and irrigation ditches with aquatic vegetation. Require basking sites and suitable upland habitat (sandy banks or grassy open fields) for egg-laying.	No Potential. No potential habitat suitable for this species was observed within the proposed project site or buffer area.
Foothill yellow-legged frog	*Rana boylii*	-	Candidate Threatened	Partly-shaded, shallow streams and riffles with a rocky substrate in a variety of habitats. Need at least some cobble-sized substrate for egg-laying. Require at least 15 weeks to attain metamorphosis.	No Potential. No suitable habitat for this species was observed within the proposed project site or buffer area.
California red-legged frog	*Rana draytonii*	FT	CSC	Lowlands and foothills in or near permanent sources of deep water with dense, shrubby or emergent riparian vegetation. Requires 11 to 20 weeks of permanent water for larval development. Must have access to aestivation habitat, consisting of small mammal burrows and moist leaf litter.	No Potential. No suitable habitat suitable for this species was observed within the proposed project site or buffer area.
Red-bellied newt	*Taricha rivularis*	-	CSC	Broadleaved upland forest, north coast coniferous forest, redwood forest, riparian forest, and riparian woodland.	No Potential. No suitable habitat for this species was observed within the proposed project site or buffer area.
Fish					
Steelhead – central California coast DPS	*Oncorhynchus mykiss irideus*	FT	-	After maturing for 1 to 3 years in the ocean. Adult steelhead typically begin their spawning migration into the Sacramento and San Joaquin Delta System in fall and winter. Adult steelhead enter the mainstream Sacramento River in July, peak in abundance in the fall, and continue migrating through February and March. Juvenile steelhead will remain in fresh water and continue to rear for 1 to 3 years before migrating to the ocean in November through May to mature. Smolt typically migrate to the ocean during March through June.	No Potential. No potential habitat suitable for this species was observed within the proposed project site or buffer area.
Delta Smelt	*Hypomesus transpacificus*	FT	CE	Delta smelt live one year, dying after first spawning. Spawning occurs March through May in river channels and tidally influenced backwater sloughs upstream of the mixing zone where saltwater meets freshwater. Sacramento and San Joaquin Rivers then	No Potential. No potential habitat suitable for this species was observed within the proposed project site or buffer area.

				transport the delta smelt larvae downstream to the mixing zone, normally located in the Suisun Bay. Young delta smelt feed and grow in the mixing zone before starting their upstream spawning migration October through December.	
Plants					
Franciscan onion	*Allium peninsulare var. franciscanum*	-	List 1B.2	Cismontane woodland, and valley and foothill grassland. Elevational range: 50 to 300 meters. Blooming period: May through June.	Potentially present. Potential habitat for this species occurs within the proposed project site and buffer area. No individuals of this species were observed during surveys. This species has not been documented within the boundaries of or in proximity to the proposed project site (CDFW 2014) (see Figure 3).
Sonoma alopecurus	*Alopecurus aequalis var. sonomensis*	FE	List 1B.1	Freshwater marshes and swamps, riparian scrub. Found in wet areas, marshes, and riparian banks with other wetland species. Elevational range: 5 to 360 meters. Blooming period: May through July.	No Potential. No potential habitat suitable for this species was observed within the proposed project site or buffer area.
Napa false indigo	*Amorpha californica var. napensis*	-	List 1B.2	Broadleaved upland forest, chaparral, and cismontane woodland. Found in openings in forest, woodland, or chaparral. Elevational range: 150 to 2,000 meters. Blooming period: April through July.	Potentially present. Potential habitat for this species occurs within the proposed project site and buffer area. No individuals of this species were observed during surveys. This species has not been documented within the boundaries of or in proximity to the proposed project site (CDFW 2017) (see Figure 3).
Bent-flowered fiddleneck	*Amsinckia lunaris*	-	List 1B.2	Coastal bluff scrub, cismontane woodland, and valley and foothill grassland. Elevational range: 3 to 500 meters. Blooming period: March through June.	Potentially present. Potential habitat for this species occurs within the proposed project site and buffer area within non-native annual grassland habitat. No individuals of this species were observed during surveys. This species has not been documented within the boundaries of or in proximity to the proposed project site (CDFW 2017) (see Figure 3).
Slender silver moss	*Anomobryum julaceum*	-	List 4.2	Found in broadleafed upland forest, lower montane coniferous forest, and north coast coniferous forest. Elevational range: 100 to 1,000 meters. Blooming period: n/a	Potentially present. Potential habitat for this species occurs within the proposed project site and buffer area within non-native annual grassland habitat. No individuals of this species were observed during surveys. This species has not been documented within the boundaries of or in proximity to the proposed project site (CDFW 2017) (see Figure 3).

Twig-like snapdragon	*Antirrhinum virga*	-	List 4.3	Found in chaparral and lower montane coniferous forest. Elevational range: 100 to 2,015 meters. Blooming period: June to July.	Potentially present. Potential habitat for this species occurs within the proposed project site and buffer area within non-native annual grassland habitat. No individuals of this species were observed during surveys. This species has not been documented within the boundaries of or in proximity to the proposed project site (CDFW 2017) (see Figure 3).
Baker's manzanita-	*Arctostaphylos bakeri ssp. bakeri*	-	CR, 1B.1	Found in broadleafed upland forest, and chaparral. Elevational range: 75 to 300 meters. Blooming period: February through April.	Potentially present. Potential habitat for this species occurs within the proposed project site and buffer area within non-native annual grassland habitat. No individuals of this species were observed during surveys. This species has not been documented within the boundaries of or in proximity to the proposed project site (CDFW 2017) (see Figure 3).
Rincon Ridge manzanita	*Arctostaphylos stanfordiana var. repens*	-	List 1B.1	Found in chaparral, and cismontane woodland. Elevation ranges from 75 to 370 meters. Blooms February-April (May).	Potentially present. Potential habitat for this species occurs within the proposed project site and buffer area. No individuals of this species were observed during surveys. This species has not been documented within the boundaries of or in proximity to the proposed project site (CDFW 2017) (see Figure 3).
Brewer's milk-vetch	*Astragalus breweri*	-	List 4.2	Found in chaparral, cismontane woodland, meadows and seeps, valley and foothill grassland (open, often gravelly). Elevational range: 90 to 730 meters. Blooming period: April to June.	Potentially present. Potential habitat for this species occurs within the proposed project site and buffer area. No individuals of this species were observed during surveys. This species has not been documented within the boundaries of or in proximity to the proposed project site (CDFW 2017) (see Figure 3).
Clara Hunt's milk-vetch	*Astragalus claranus*	FE	CE, List 1B.1	Found in chaparral, cismontane woodland, meadows and seeps, valley and foothill grassland (open, often gravelly). Elevational range: 75 to 275 meters. Blooming period: March to May.	Potentially present. Potential habitat for this species occurs within the proposed project site and buffer area. No individuals of this species were observed during surveys. This species has not been documented within the boundaries of or in proximity to the proposed project site (CDFW 2017) (see Figure 3).
Cleveland's milk-vetch	Astragalus clevelandii	-	4.3	Found in chaparral, cismontane woodland, riparian forest. Elevational range: 200 to 1,500 meters.	Potentially present. Potential habitat for this species occurs within the proposed

				Blooming period: June to September.	project site and buffer area. No individuals of this species were observed during surveys. This species has not been documented within the boundaries of or in proximity to the proposed project site (CDFW 2017) (see Figure 3).
Big-scale balsamroot	*Balsamorhiza macrolepis*	-	List 1B.2	Found in chaparral, cismontane woodland, valley and foothill grassland. Elevational range: 90 to 1,555 meters. Blooming period: March to June.	Potentially present. Potential habitat for this species occurs within the proposed project site and buffer area. No individuals of this species were observed during surveys. This species has not been documented within the boundaries of or in proximity to the proposed project site (CDFW 2017) (see Figure 3).
Sonoma sunshine	*Blennosperma bakeri*	FE	CE, List 1B.1	Valley and foothill grassland (mesic), vernal pools. Elevation range: 10 to 110 meters. Blooming period: March through May.	Potentially present. Potential habitat for this species occurs within the proposed project site and buffer area. No individuals of this species were observed during surveys. This species has not been documented within the boundaries of or in proximity to the proposed project site (CDFW 2017) (see Figure 3).
Narrow-anthered brodiaea	*Brodiaea leptandra*	-	List 1B.2	Found in broadleafed upland forest, chaparral, cismontane woodland, lower montane coniferous forest, valley and foothill grassland/volcanic. Elevation ranges from 110 to 915 meters. Blooms May through July.	Potentially present. Potential habitat for this species occurs within the proposed project site and buffer area. No individuals of this species were observed during surveys. This species has not been documented within the boundaries of or in proximity to the proposed project site (CDFW 2017) (see Figure 3).
Serpentine reed grass	*Calamagrostis ophitidis*	-	List 4.3	Found in chaparral (open, often north-facing slopes), lower montane coniferous forest, meadows and seeps, valley and foothill grassland. Elevational range: 90 to 1,065 meters. Blooming period: April to July.	Potentially present. Potential habitat for this species occurs within the proposed project site and buffer area. No individuals of this species were observed during surveys. This species has not been documented within the boundaries of or in proximity to the proposed project site (CDFW 2017) (see Figure 3).
Brewer's calandrinia	*Calandrinia breweri*	-	List 4.2	Found in chaparral, and coastal scrub. Elevational range: 10 to 1,220 meters. Blooming period: (January) March to June.	No Potential. No potential habitat suitable for this species was observed within the proposed project site or buffer area.
Pink star-tulip	*Calochortus uniflorus*	-	List 4.2	Found in coastal prairie, coastal scrub, meadows and seeps, north coast coniferous forest. Elevational	Potentially present. Potential habitat for this species occurs within the proposed

				range: 10 to 1,070 meters. Blooming period: April to June.	project site and buffer area. No individuals of this species were observed during surveys. This species has not been documented within the boundaries of or in proximity to the proposed project site (CDFW 2017) (see Figure 3).
Mt. Saint Helena morning-glory	*Calystegia collina ssp. oxyphylla*	-	List 4.2	Found in chaparral, lower montane coniferous forest, valley and foothill grassland. Elevational range: 279 to 1,010 meters. Blooming period: April through June.	Potentially present. Potential habitat for this species occurs within the proposed project site and buffer area. No individuals of this species were observed during surveys. This species has not been documented within the boundaries of or in proximity to the proposed project site (CDFW 2017) (see Figure 3).
Johnny-nip	*Castilleja ambigua var. ambigua*	-	List 4.2	Found in coastal bluff scrub, coastal prairie, coastal scrub, marshes and swamps, valley and foothill grassland, vernal pools margins. Elevational range: 0 to 625 meters. Blooming period: March to August.	Potentially present. Potential habitat for this species occurs within the proposed project site and buffer area. No individuals of this species were observed during surveys. This species has not been documented within the boundaries of or in proximity to the proposed project site (CDFW 2017) (see Figure 3).
Rincon Ridge ceanothus	*Ceanothus confusus*	-	List 1B.1	Found in chaparral, cismontane woodland and closed-cone coniferous forests. Elevational range: 75 to 1065 meters. Blooming period: February through June.	Potentially present. Potential habitat for this species occurs within the proposed project site and buffer area. No individuals of this species were observed during surveys. This species has not been documented within the boundaries of or in proximity to the proposed project site (CDFW 2017) (see Figure 3).
Calistoga ceanothus	*Ceanothus divergens*	-	List 1B.2	Found in chaparral (serpentinite or volcanic, rocky). Elevational range: 170 to 950 meters. Blooming period: February through April.	No Potential. No potential habitat suitable for this species was observed within the proposed project site or buffer area.
Glory brush	*Ceanothus gloriosus var. exaltatus*	-	List 4.3	Found in chaparral. Elevational range: 30 to 610 meters. Blooming period: March to June (August)	No Potential. No potential habitat suitable for this species was observed within the proposed project site or buffer area.
Holly-leaved ceanothus	*Ceanothus purpureus*	-	List 1B.2	Found in chaparral and cismontane woodland. Elevational range: 120 to 640 meters. Blooming period: February through June.	Potentially present. Potential habitat for this species occurs within the proposed project site and buffer area. No individuals of this species were observed during surveys. This species has not been documented within the boundaries of or in proximity to the proposed project site

					(CDFW 2017) (see Figure 3).
Sonoma ceanothus	*Ceanothus sonomensis*	-	List 1B.2	Found in California chaparral and woodlands (sandy, serpentinite or volcanic). Elevational range: 215 to 800 meters. Blooming period: February through April.	Potentially present. Potential habitat for this species occurs within the proposed project site and buffer area. No individuals of this species were observed during surveys. This species has been documented approximate 0.36 miles east of the proposed project site, and 1.26 miles west of the prosed project site. (CDFW 2017) (see Figure 3).
Pappose tarplant	*Centromadia parryi ssp. parryi*	-	List 1B.2	Found in chaparral, coastal prairie, meadows and seeps, marshes and swamps (coastal salt), valley and foothill grassland (vernally mesic)/often alkaline. Elevation range: 0 to 420 meters. Blooms May to November.	Potentially present. Potential habitat for this species occurs within the proposed project site and buffer area. No individuals of this species were observed during surveys. This species has not been documented within the boundaries of or in proximity to the proposed project site (CDFW 2017) (see Figure 3).
Sonoma spineflower	*Chorizanthe valida*	FE	CE, 1B.1	Found in coastal prairie (sandy). Elevation range: 10 to 305 meters. Blooms June to August.	No Potential. No potential habitat suitable for this species was observed within the proposed project site or buffer area.
Brewer's clarkia	*Clarkia breweri*	-	4.2	Found in chaparral, cismontane woodland, and coastal scrub. Elevational range: 230 to 1860 meters. Blooming period: April to June.	Potentially present. Potential habitat for this species occurs within the proposed project site and buffer area. No individuals of this species were observed during surveys. This species has not been documented within the boundaries of or in proximity to the proposed project site (CDFW 2017) (see Figure 3).
Tracy's clarkia	*Clarkia gracilis ssp. tracyi*	-	4.2	Found in chaparral and cismontane woodland. Elevational range: 65 to 650 meters. Blooming period: April through July.	Potentially present. Potential habitat for this species occurs within the proposed project site and buffer area. No individuals of this species were observed during surveys. This species has not been documented within the boundaries of or in proximity to the proposed project site (CDFW 2017) (see Figure 3).
Serpentine collomia	*Collomia diversifolia*	-	List 4.2	Found in chaparral, cismontane woodland. Elevational range: 200 to 600 meters. Blooming period: May through June.	Potentially present. Potential habitat for this species occurs within the proposed project site and buffer area. No individuals of this species were observed during surveys. This species has not been documented within the boundaries of or in proximity to the proposed project site

					(CDFW 2017) (see Figure 3).
Serpentine bird's-beak	*Cordylanthus tenuis ssp. brunneus*	-	List 4.3	Found in closed-cone coniferous forest, chaparral, cismontane woodland. Elevational range: 305 to 915 meters. Blooming period: July to August.	Potentially present. Potential habitat for this species occurs within the proposed project site and buffer area. No individuals of this species were observed during surveys. This species has not been documented within the boundaries of or in proximity to the proposed project site (CDFW 2017) (see Figure 3).
Swamp larkspur	*Delphinium uliginosum*	-	4.2	Found in chaparral, valley and foothill grassland. Elevational range: 340 to 610 meters. Blooming period: May through June.	Potentially present. Potential habitat for this species occurs within the proposed project site and buffer area. No individuals of this species were observed during surveys. This species has not been documented within the boundaries of or in proximity to the proposed project site (CDFW 2017) (see Figure 3).
Dwarf downingia	*Downingia pusilla*	-	List 2B.2	Found in valley and foothill grasslands and vernal pools. Found in vernal lake and pool margins with a variety of associates. Elevational range: 1 to 485 meters. Blooming period: March through May.	Potentially present. Potential habitat for this species occurs within the proposed project site and buffer area. No individuals of this species were observed during surveys. This species has not been documented within the boundaries of or in proximity to the proposed project site (CDFW 2017) (see Figure 3).
Streamside daisy	*Erigeron biolettii*	-	List 3	Found in broadleafed upland forest, cismontane woodland, North Coast coniferous forest . Elevational range: 30 to 1,100 meters. Blooming period: June through September.	Potentially present. Potential habitat for this species occurs within the proposed project site and buffer area. No individuals of this species were observed during surveys. This species has not been documented within the boundaries of or in proximity to the proposed project site (CDFW 2017) (see Figure 3).
Greene's narrow-leaved daisy	*Erigeron greenei*	-	List 1B.2	Found in chaparral. Elevational range: 80 to 1005 meters. Blooming period: May through September.	No Potential. No potential habitat suitable for this species was observed within the proposed project site or buffer area.
Serpentine daisy	*Erigeron serpentinus*	-	List 1B.2	Found in chaparral. Elevational range: 60 to 670 meters. Blooming period: May through August.	No Potential. No potential habitat suitable for this species was observed within the proposed project site or buffer area.
Loch Lomond button-celery	*Eryngium constancei*	FE	CE, List 1B.1	Found in vernal pools. Elevational range: 460 to 855 meters. Blooming period: April through June.	No Potential. No potential habitat suitable for this species was observed within the proposed project site or buffer area.
Fragrant fritillary	*Fritillaria liliacea*	-	List 1B.2	Found in cismontane woodland, coastal scrub,	Potentially present. Potential habitat for

				coastal prairie, and valley and foothill grassland. Elevational range: 3 to 410 meters. Blooming period: February through April.	this species occurs within the proposed project site and buffer area. No individuals of this species were observed during surveys. This species has not been documented within the boundaries of or in proximity to the proposed project site (CDFW 2017) (see Figure 3).
Boggs Lake hedge-hyssop	*Gratiola heterosepala*	-	CE, List 1B.2	Found in marshes and swamps (lake margins), vernal pools. Elevational range: 10 to 2,375 meters. Blooming period: April through August.	No Potential. No potential habitat suitable for this species was observed within the proposed project site or buffer area.
Nodding harmonia	*Harmonia nutans*		4.3	Found in chaparral, cismontane woodland. Elevational range: 75 to 975 meters. Blooming period: March to May.	Potentially present. Potential habitat for this species occurs within the proposed project site and buffer area. No individuals of this species were observed during surveys. This species has not been documented within the boundaries of or in proximity to the proposed project site (CDFW 2017) (see Figure 3).
Congested-headed hayfield tarplant	*Hemizonia congesta ssp. congesta*	-	List 1B.2	Valley and foothill grassland/sometimes roadsides. Elevation ranges from 20 to 560 meters. Blooms April to November.	Potentially present. Potential habitat for this species occurs within the proposed project site and buffer area. No individuals of this species were observed during surveys. This species has not been documented within the boundaries of or in proximity to the proposed project site (CDFW 2017) (see Figure 3).
Two-carpellate western flax	*Hesperolinon bicarpellatum*	-	List 1B.2	Found chaparral (serpentinite). Elevational range: 60 to 1,005 meters. Blooming period: May to July.	No Potential. No potential habitat suitable for this species was observed within the proposed project site or buffer area.
Sharsmith's western flax	*Hesperolinon sharsmithiae*	-	List 1B.2	Found in chaparral. Elevational range: 270 to 300 meters. Blooming period: March to May.	No Potential. No potential habitat suitable for this species was observed within the proposed project site or buffer area.
Thin-lobed horkelia	*Horkelia tenuiloba*	-	List 1B.2	Found in broadleafed upland forest, chaparral, and valley and foothill grassland. Elevational range: 50 to 500 meters. Blooming period: May through August.	No Potential. No potential habitat suitable for this species was observed within the proposed project site or buffer area.
Coast iris	*Iris longipetala*	-	4.2	Found in north coastal prairie, lower montane coniferous forest, meadows and seeps. Elevational range: 0 to 600 meters. Blooming period: March through May.	Potentially present. Potential habitat for this species occurs within the proposed project site and buffer area. No individuals of this species were observed during surveys. This species has not been documented within the boundaries of or in proximity to the proposed project site (CDFW 2017) (see Figure 3).

Burke's goldfields	*Lasthenia burkei*	FE	CE, List 1B.1	Found in meadows and seeps (mesic), vernal pools. Elevation ranges from 15 to 600 meters. Blooms April to June.	No Potential. No potential habitat suitable for this species was observed within the proposed project site or buffer area.
Contra Costa goldfields	*Lasthenia conjugens*	FE	1B.1	Found in cismontane woodland, playas (alkaline), valley and foothill grassland, vernal pools. Elevational range: 0 to 470 meters. Blooming period: March through June.	Potentially present. Potential habitat for this species occurs within the proposed project site and buffer area. No individuals of this species were observed during surveys. This species has not been documented within the boundaries of or in proximity to the proposed project site (CDFW 2017) (see Figure 3).
Colusa layia	*Layia septentrionalis*	-	1B.2	Found in chaparral, cismontane woodland, valley and foothill grassland. Elevational range: 100 to 1095 meters. Blooming period: April through May.	Potentially present. Potential habitat for this species occurs within the proposed project site and buffer area. No individuals of this species were observed during surveys. This species has not been documented within the boundaries of or in proximity to the proposed project site (CDFW 2017) (see Figure 3).
Legenere	*Legenere limosa*	-	1B.1	Found in chaparral, cismontane woodland, valley and foothill grassland. Elevational range: 1 to 880 meters. Blooming period: April through June.	Potentially present. Potential habitat for this species occurs within the proposed project site and buffer area. No individuals of this species were observed during surveys. This species has not been documented within the boundaries of or in proximity to the proposed project site (CDFW 2017) (see Figure 3).
Bristly leptosiphon	*Leptosiphon acicularis*	-	4.2	Found in chaparral, cismontane woodland, coastal prairie, valley and foothill grassland. Elevational range: 55 to 1,500 meters. Blooming period: April through July.	Potentially present. Potential habitat for this species occurs within the proposed project site and buffer area. No individuals of this species were observed during surveys. This species has not been documented within the boundaries of or in proximity to the proposed project site (CDFW 2017) (see Figure 3).
Jepson's leptosiphon	*Leptosiphon jepsonii*	-	List 1B.2	Chaparral, cismontane woodland/usually volcanic. Elevation ranges from 100 to 500 meters. Blooms March through May.	Potentially present. Potential habitat for this species occurs within the proposed project site and buffer area. No individuals of this species were observed during surveys. This species has been documented approximately 0.29 miles east of the proposed project site. (CDFW 2017) (see Figure 3).
Woolly-headed lessingia	*Lessingia hololeuca*	-	3	Found in broadleafed upland forest, coastal scrub,	Potentially present. Potential habitat for

				lower montane coniferous forest, valley and foothill grassland. Elevational range: 15 to 305 meters. Blooming period: June through October.	this species occurs within the proposed project site and buffer area. No individuals of this species were observed during surveys. This species has not been documented within the boundaries of or in proximity to the proposed project site (CDFW 2017) (see Figure 3).
Redwood lily	*Lilium rubescens*		4.2	Found in broadleafed upland forest, coastal scrub, lower montane coniferous forest, valley and foothill grassland. Elevational range: 30 to 1,910 meters. Blooming period: April through August (September).	Potentially present. Potential habitat for this species occurs within the proposed project site and buffer area. No individuals of this species were observed during surveys. This species has not been documented within the boundaries of or in proximity to the proposed project site (CDFW 2017) (see Figure 3).
Sebastopol meadowfoam	*Limnanthes vinculans*	FE	CE, List 1B.1	Meadows and seeps, valley and foothill grassland, vernal pools/vernally mesic. Elevation ranges from 15 to 305 meters. Blooms April and May.	Potentially present. Potential habitat for this species occurs within the proposed project site and buffer area. No individuals of this species were observed during surveys. This species has not been documented within the boundaries of or in proximity to the proposed project site (CDFW 2017) (see Figure 3).
Napa lomatium	*Lomatium repostum*	-	4.3	Found in chaparral, and cismontane woodland. Elevational range: 90 to 830 meters. Blooming period: March to June.	Potentially present. Potential habitat for this species occurs within the proposed project site and buffer area. No individuals of this species were observed during surveys. This species has not been documented within the boundaries of or in proximity to the proposed project site (CDFW 2017) (see Figure 3).
Cobb Mountain lupine	*Lupinus sericatus*	-	1B.2	Found in broadleafed upland forest, chaparral, cismontane woodland, and lower montane coniferous forest. Elevational range: 275 to 1,525 meters. Blooming period: March to June.	Potentially present. Potential habitat for this species occurs within the proposed project site and buffer area. No individuals of this species were observed during surveys. This species has not been documented within the boundaries of or in proximity to the proposed project site (CDFW 2017) (see Figure 3).
Mt. Diablo cottonweed	*Micropus amphibolus*	-	3.2	Found in broadleafed upland forest, chaparral, cismontane woodland, valley and foothill grassland. Elevational range: 45 to 825 meters. Blooming period: March to May.	Potentially present. Potential habitat for this species occurs within the proposed project site and buffer area. No individuals of this species were observed during surveys. This species has not been

					documented within the boundaries of or in proximity to the proposed project site (CDFW 2017) (see Figure 3).
Marsh microseris	*Microseris paludosa*	-	1B.2	Found in closed-cone coniferous forest, cismontane woodland, coastal scrub, valley and foothill grassland. Elevational range: 5 to 355 meters. Blooming period: April to June. (July)	Potentially present. Potential habitat for this species occurs within the proposed project site and buffer area. No individuals of this species were observed during surveys. This species has not been documented within the boundaries of or in proximity to the proposed project site (CDFW 2017) (see Figure 3).
Green monardella	*Monardella viridis*	-	4.3	Found in broadleafed upland forest, chaparral, and cismontane woodland. Elevational range: 100 to 1,010 meters. Blooming period: June through September.	Potentially present. Potential habitat for this species occurs within the proposed project site and buffer area. No individuals of this species were observed during surveys. This species has not been documented within the boundaries of or in proximity to the proposed project site (CDFW 2017) (see Figure 3).
Cotula navarretia	*Navarretia cotulifolia*	-	4.2	Found in chaparral, cismontane woodland, valley and foothill grassland. Elevational range: 4 to 1,830 meters. Blooming period: May to June.	Potentially present. Potential habitat for this species occurs within the proposed project site and buffer area. No individuals of this species were observed during surveys. This species has not been documented within the boundaries of or in proximity to the proposed project site (CDFW 2017) (see Figure 3).
Tehama navarretia	*Navarretia heterandra*	-	4.3	Found in valley and foothill grassland (mesic), and vernal pools. Elevational range: 30 to 1,010 meters. Blooming period: April through June.	Potentially present. Potential habitat for this species occurs within the proposed project site and buffer area. No individuals of this species were observed during surveys. This species has not been documented within the boundaries of or in proximity to the proposed project site (CDFW 2017) (see Figure 3).
Baker's navarretia	*Navarretia leucocephala ssp. bakeri*	-	1B.1	Found in cismontane woodland, lower montane coniferous forest, meadows and seeps, valley and foothill grassland, Vernal pools Elevational range: 5 to 1,740 meters. Blooming period: April to July.	Potentially present. Potential habitat for this species occurs within the proposed project site and buffer area. No individuals of this species were observed during surveys. This species has not been documented within the boundaries of or in proximity to the proposed project site (CDFW 2017) (see Figure 3).
Many-flowered navarretia	*Navarretia*	FE	CE, List	Found in cismontane woodland, lower montane	Potentially present. Potential habitat for

	leucocephala ssp. plieantha		1B.2	coniferous forest, meadows and seeps, valley and foothill grassland, vernal pools/mesic. Elevation ranges from 20 to 5710 feet (5 to 1740 meters). Blooms April through July.	this species occurs within the proposed project site and buffer area. No individuals of this species were observed during surveys. This species has not been documented within the boundaries of or in proximity to the proposed project site (CDFW 2017) (see Figure 3).
Sonoma beardtongue	*Penstemon newberryi var. sonomensis*	-	List 1B.3	Found in chaparral (rocky). Elevational range: 700 to 1,370 meters. Blooming period: April through August.	No Potential. No potential habitat suitable for this species was observed within the proposed project site or buffer area.
Calistoga popcornflower	*Plagiobothrys strictus*	FE	CT, List 1B.1	Found in meadows and seeps, valley and foothill grassland, vernal pools. Elevational range: 90 to 160 meters. Blooming period: March through June.	Potentially present. Potential habitat for this species occurs within the proposed project site and buffer area. No individuals of this species were observed during surveys. This species has not been documented within the boundaries of or in proximity to the proposed project site (CDFW 2017) (see Figure 3).
North Coast semaphore grass	*Pleuropogon hooverianus*	-	CT, List 1B.1	Found in broadleafed upland forest, meadows and seeps, north coast coniferous forest. Elevational range: 10 to 671 meters. Blooming period: April through June.	Potentially present. Potential habitat for this species occurs within the proposed project site and buffer area. No individuals of this species were observed during surveys. This species has not been documented within the boundaries of or in proximity to the proposed project site (CDFW 2017) (see Figure 3).
Nodding semaphore grass	*Pleuropogon refractus*	-	4.2	Found in lower montane coniferous forest, meadows and seeps, north coast coniferous forest, riparian forest. Elevational range: 0 to 1,600 meters. Blooming period: (March) April through August.	Potentially present. Potential habitat for this species occurs within the proposed project site and buffer area. No individuals of this species were observed during surveys. This species has not been documented within the boundaries of or in proximity to the proposed project site (CDFW 2017) (see Figure 3).
Napa blue grass	*Poa napensis*	FE	CE, List 1B.1	Found in lower montane coniferous forest, meadows and seeps, north coast coniferous forest, riparian forest. Elevational range: 100 to 200 meters. Blooming period: May through August.	Potentially present. Potential habitat for this species occurs within the proposed project site and buffer area. No individuals of this species were observed during surveys. This species has not been documented within the boundaries of or in proximity to the proposed project site (CDFW 2017) (see Figure 3).
California alkali grass	*Puccinellia simplex*	-	1B.2	Found in chenopod scrub, meadows and seeps, valley and foothill grassland, vernal pools.	Potentially present. Potential habitat for this species occurs within the proposed

				Elevational range: 2 to 930 meters. Blooming period: March through May.	project site and buffer area. No individuals of this species were observed during surveys. This species has not been documented within the boundaries of or in proximity to the proposed project site (CDFW 2017) (see Figure 3).
Lobb's aquatic buttercup	*Ranunculus lobbii*	-	4.2	Found in cismontane woodland, north coast coniferous forest, valley and foothill grassland, vernal pools. Elevational range: 15 to 470 meters. Blooming period: February through May.	Potentially present. Potential habitat for this species occurs within the proposed project site and buffer area. No individuals of this species were observed during surveys. This species has not been documented within the boundaries of or in proximity to the proposed project site (CDFW 2017) (see Figure 3).
Round-headed beaked-rush	*Rhynchospora globularis*	-	2B.1	Found marshes and swamps (freshwater). Elevational range: 45 to 60 meters. Blooming period: July through August.	No Potential. No potential habitat suitable for this species was observed within the proposed project site or buffer area.
Cleveland's ragwort	*Senecio clevelandii var. clevelandii*	-	4.3	Found in chaparral (serpentinite seeps). Elevational range: 365 to 900 meters. Blooming period: June through July.	No Potential. No potential habitat suitable for this species was observed within the proposed project site or buffer area.
Napa checkerbloom	*Sidalcea hickmanii ssp. napensis*	-	1B.1	Found in chaparral. Elevational range: 415 to 610. meters. Blooming period: May through August.	No Potential. No potential habitat suitable for this species was observed within the proposed project site or buffer area.
Marsh checkerbloom	Sidalcea oregana ssp. hydrophila	-	1B.2	Found meadows and seeps, riparian forest. Elevational range: 1,100 to 2,300. meters. Blooming period: (June)July and August.	Potentially present. Potential habitat for this species occurs within the proposed project site and buffer area. No individuals of this species were observed during surveys. This species has not been documented within the boundaries of or in proximity to the proposed project site (CDFW 2017) (see Figure 3).
Kenwood Marsh checkerbloom	*Sidalcea oregana ssp. valida*	FE	CE, 1B.1	Found in marshes and swamps (freshwater). Elevational range: 115 to 150. meters. Blooming period: June to September	No Potential. No potential habitat suitable for this species was observed within the proposed project site or buffer area.
Long-styled sand-spurrey	*Spergularia macrotheca var. longistyla*	-	1B.2	Found in meadows and seeps, marshes and swamps. Elevational range: 0 to 255. meters. Blooming period: February through May.	Potentially present. Potential habitat for this species occurs within the proposed project site and buffer area. No individuals of this species were observed during surveys. This species has not been documented within the boundaries of or in proximity to the proposed project site (CDFW 2017) (see Figure 3).
Green jewelflower	*Streptanthus hesperidis*	-	1B.2	Found in chaparral (openings), cismontane woodland Elevational range: 130 to 760. meters. Blooming	Potentially present. Potential habitat for this species occurs within the proposed

				period: May through July.	project site and buffer area. No individuals of this species were observed during surveys. This species has not been documented within the boundaries of or in proximity to the proposed project site (CDFW 2017) (see Figure 3).
Marsh zigadenus	*Toxicoscordion fontanum*	-	4.2	Found in chaparral, cismontane woodland, lower montane coniferous forest, meadows and seeps, marshes and swamps. Elevational range: 15 to 1,000. meters. Blooming period: April through July.	Potentially present. Potential habitat for this species occurs within the proposed project site and buffer area. No individuals of this species were observed during surveys. This species has not been documented within the boundaries of or in proximity to the proposed project site (CDFW 2017) (see Figure 3).
Napa bluecurls	*Trichostema ruygtii*	-	1B.2	Found chaparral, cismontane woodland, lower montane coniferous forest, valley and foothill grassland, and vernal pools. Elevational range: 30 to 680. meters. Blooming period: June through October.	Potentially present. Potential habitat for this species occurs within the proposed project site and buffer area. No individuals of this species were observed during surveys. This species has not been documented within the boundaries of or in proximity to the proposed project site (CDFW 2017) (see Figure 3).
Two-fork clover	*Trifolium amoenum*	FE	1B.1	Found in coastal bluff scrub, valley and foothill grassland (sometimes serpentinite). Elevational range: 5 to 415 meters. Blooming period: April through June.	Potentially present. Potential habitat for this species occurs within the proposed project site and buffer area. No individuals of this species were observed during surveys. This species has not been documented within the boundaries of or in proximity to the proposed project site (CDFW 2017) (see Figure 3).
Saline clover	*Trifolium hydrophilum*	-	1B.2	Found marshes and swamps, valley and foothill grassland (mesic, alkaline), and vernal pools. Elevational range: 0 to 300. meters. Blooming period: April through June.	Potentially present. Potential habitat for this species occurs within the proposed project site and buffer area. No individuals of this species were observed during surveys. This species has not been documented within the boundaries of or in proximity to the proposed project site (CDFW 2017) (see Figure 3).
Coastal triquetrella	*Triquetrella californica*	-	1B.2	Found in coastal bluff scrub, coastal scrub. Elevational range: 10 to 100. meters. Blooming period: n/a.	No Potential. No potential habitat suitable for this species was observed within the proposed project site or buffer area.
Dark-mouthed triteleia	*Triteleia lugens*	-	4.3	Found in broadleafed upland forest, chaparral, coastal scrub, lower montane coniferous forest. Elevational range: 100 to 1000. meters. Blooming	Potentially present. Potential habitat for this species occurs within the proposed project site and buffer area. No individuals

				period: April through June.	of this species were observed during surveys. This species has not been documented within the boundaries of or in proximity to the proposed project site (CDFW 2017) (see Figure 3).
Oval-leaved viburnum	*Viburnum ellipticum*	-	2B.3	Found in chaparral, cismontane woodland, lower montane coniferous forest. Elevational range: 215 to 1,400. meters. Blooming period: May through June.	Potentially present. Potential habitat for this species occurs within the proposed project site and buffer area. No individuals of this species were observed during surveys. This species has not been documented within the boundaries of or in proximity to the proposed project site (CDFW 2017) (see Figure 3).
Sensitive Vegetative Communities					
Valley Needlegrass Grassland (Not present in project site or buffer area)					
Northern Vernal Pool (Not present in project site or buffer area)					

Status Codes:

Federal
FE = Federally listed as Endangered
FT = Federally listed as Threatened
FC = Federal Candidate species

State
CE = California listed as Endangered
CT = California listed as Threatened
CR = California listed as Rare
CFP = California Fully Protected
CSC = Species of Special Concern
WL = CDFW Watch List

California Rare Plant Rank (formerly known as CNPS Lists)
California Rare Plant Rank 1A = Plants presumed extinct in California
California Rare Plant Rank 1B = Plants rare, threatened, or endangered in California and elsewhere
California Rare Plant Rank 2A = Plants presumed extirpated from California, but more common elsewhere
California Rare Plant Rank 2B = Plants rare or endangered in California, but more common elsewhere
California Rare Plant Rank 3 = Plants about which we need more information; a review list
California Rare Plant Rank 4 = Plants of limited distribution; a watch list.
California Rare Plant Rank Rarity Status of.1 = Seriously endangered in California
California Rare Plant Rank Rarity Status of 2 = Fairly endangered in California

Status, distribution, and habitat information from the California Department of Fish and Wildlife (CDFW) California Natural Diversity Database RareFind 5 (CDFW 2017); California Native Plant Society, California Rare Plant Electronic Inventory (CNPS 2017); and USFWS Online Endangered Species Database (USFWS 2017).

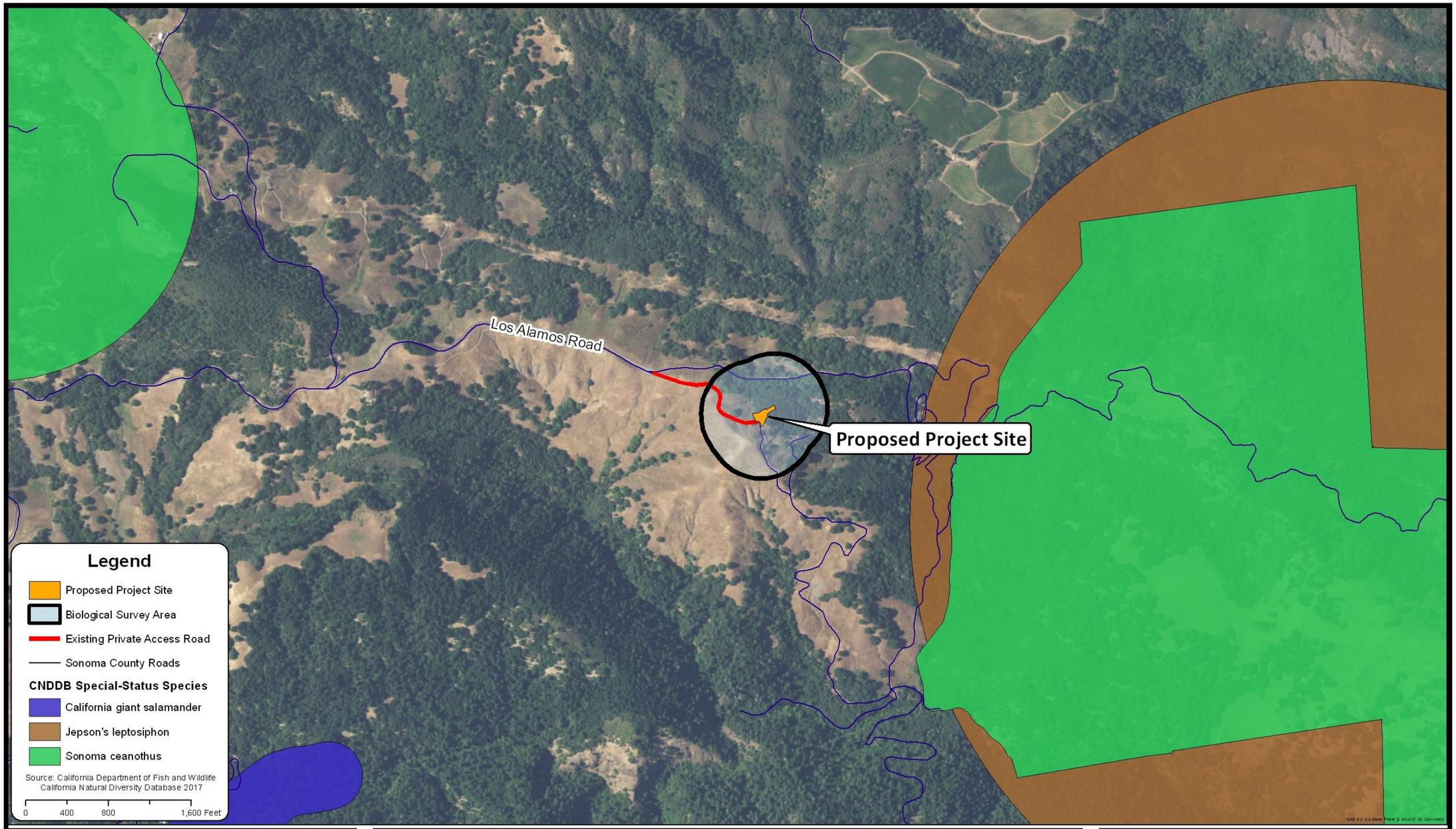

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FIGURE 3

CNDDB Species Occurences in the Vicinity of the Project Area

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SPECIAL-STATUS PLANT SURVEYS

Literature Review: Prior to conducting field surveys, we reviewed information from published and unpublished sources to determine special-status plant species known, or that have potential to occur in the vicinity of the proposed project. Special-status plant species include species listed as Endangered, Threatened, or Rare by USFWS (USFWS 2017a), CDFW (CDFW 2017), and species listed by CNPS (CNPS 2017).

Plant Species Surveys and Identification: A survey to identify special-status plant species was conducted for the proposed project site on September 20, 2017. This survey was floristic in nature and were completed concurrent with surveys to detect sensitive wildlife species. Surveys were conducted in accordance with the USFWS *Guidelines for Conducting and Reporting Botanical Inventories for Federally Listed, Proposed, and Candidate Plants* (USFWS 2000) and the CDFW *Protocols for Surveying and evaluating impacts to special-status native plant populations and natural communities* (CDFG 2009). Rare plant surveys were also performed using demographic survey techniques derived from the CNPS rare plant monitoring guidelines (CNPS 2011). These guidelines include conducting floristically based surveys, identifying all plants encountered to the species level, or identifying to the level necessary to detect rare plants if present.

We surveyed 30 to 50 feet wide transects within the proposed project site and the 500-foot radius buffer area. We identified vascular plant species encountered in the surveys using standard manuals (Hickman 1996). Scientific nomenclature used for plant species in this report follows Hickman (1996) and we used modifications of Cheatham and Haller (1975) and Holland (1986) to describe habitat types found in the proposed project site and buffer area. Animal species observed during biological surveys are listed in Table 2. Plant species identified are discussed in the text of the report.

RESULTS AND DISCUSSION

Results of our biological surveys for the proposed project site and buffer area are presented below. Animal species observed during biological surveys are listed in Table 2. Plant species identified are discussed in the text of the report. The following discussion describes habitat types that occur in the project site and focuses on special-status wildlife species that could potentially occur within the proposed project site, based on site conditions observed at the time of our surveys. Special-status species that were not identified on the USFWS, CDFW, or CNPS species lists for the Guerneville quadrangle are not addressed in this document.

HABITAT TYPES

The proposed project site and buffer area do not lie within any USFWS designated critical habitat areas for protected wildlife or plant species (USFWS 2017b). Habitat types observed during our biological field surveys are briefly described below.

Annual Grassland. The annual grassland vegetative community was observed within both the proposed project site and buffer area. This vegetative community makes up the majority of the

proposed project site and buffer area. This plant community is generally composed of introduced grasses and broadleaf weedy species, which quickly re-colonize disturbed areas. Common dominant and subdominant plant species that were observed within this vegetative community during biological surveys included: yarrow (*Achillea millefolium*), fiddleneck (*Amsinckia menziesii var. intermedia*), slender wild oat (*Avena barbata*), purple false brome (*Brachypodium distachyon*), black mustard (*Brassica nigra*), rattlesnake grass (*Briza maxima*), ripgut grass (*Bromus diandrus*), soft chess (*Bromus hordeaceus*), morning-glory (*Calystegia purpurata var.purpurata*), owl's-clover (*Castilleja densiflora ssp. densiflora*), yellow-star thistle (*Centaurea solstitialis*), Monterey centaury (*Centaurium muehlenbergii*), bindweed (*Convolvulus arvensis*), northern willow herb (*Epilobium ciliatum ssp. ciliatum*), broad-leaf filaree (*Erodium botrys*), red-stem filaree (*Erodium cicutarium*), California poppy (*Eschscholzia californica*), fennel (*Foeniculum vulgare*), hayfield tarplant (*Hemizonia congesta ssp. congesta*), Mediterranean barley (*Hordeum marinum ssp. gussoneanum*), hare barley (*Hordeum murinum ssp. leporinum*), Italian ryegrass (*Lolium multiflorum*), bur clover (*Medicago polymorpha*), bristly ox tongue (*Picris echioides*), common plantain (*Plantago major*), radish (*Raphanus sativus*), dandelion (*Taraxacum officinale*), subterranean clover (*Trifolium subterraneum*), and six-weeks fescue (*Vulpia bromoides*). Annual grasslands within and adjacent to the project site provides moderate habitat value for wildlife. This habitat type has the potential to support a variety of small mammals and provides important foraging habitat for raptors and other bird species. Birds commonly found in annual grasslands include Cooper's hawk (*Accipiter cooperii*), red-tailed hawks (*Buteo jamaicensis*), red-winged blackbird, coyote (*Canis latrans*), house finch (*Carpodacus mexicanus*), turkey vulture (*Cathartes aura*), killdeer (*Charadrius vociferus*), common raven (*Corvus corax*), Brewer's blackbirds (*Euphagus cyanocephalus*), American kestrels (*Falco sparverius*), black-tailed jackrabbit (*Lepus californicus*), wild turkey (*Meleagris gallopavo*), northern mockingbird (*Mimus polyglottos*), western fence lizard (*Sceloporus occidentalis*), western bluebird (*Sialia mexicana*), western meadowlark (*Sturnella neglecta*), California ground squirrels (*Spermophilus beecheyi*), and Botta's pocket gophers (*Thomomys bottae*).

Montane Hardwood Forest. This vegetative community was observed in portions of the project site and throughout the project buffer area. The montane hardwood vegetative community occurs within the project study area intermixed in upland areas with ruderal disturbed habitat. Montane hardwood habitat is composed of a pronounced hardwood tree layer, with an infrequent and poorly developed shrub stratum, and a sparse herbaceous layer. In mature stands, the hardwood tree canopy tends to be uniform, but is subordinate to conifers. A very stable community, the large number of species in the type, both conifer and hardwood, allow it to occupy and persist on a wide range of sites. Common dominant and subdominant plant species that were observed within this vegetative community during biological surveys included California maidenhair (*Adiantum jordanii*), California buckeye (*Aesculus californica*), madrone (*Arbutus menziesii*), wild ginger (*Asarum caudatum*), climbing bedstraw (*Galium porrigens var. porrigens*), tanbark oak (*Lithocarpus densiflorus var. densiflorus*), western sword fern (*Polystichum munitum*), coast live oak (*Quercus agrifolia var. agrifolia*), and canyon live oak (*Quercus chrysolepis*). Herbaceous understory consisted of plant species found in the annual grassland vegetative community. Bird and animal species typically found in montane hardwood forest include disseminators of acorns (scrub and Steller's [*Cyanocitta stelleri*)] jays, acorn woodpecker [*Melanerpes formicivorus*], and western gray squirrel [*Sciurus griseus*]), plus those that utilize

acorns as a major food source including wild turkey (*Meleagris gallopavo*), mountain quail (*Oreortyx pictus*), band-tailed pigeon (*Columba fasciata*), California ground squirrel (*Spermophilus beecheyi*), and black-tailed deer (*Odocoileus hemionus*). Many amphibians and reptiles are found on the forest floor in the montane hardwood community. Among them are ensatina (*Ensatina eschscholtzii*), relictual slender salamander (*Batrachoseps relictus*), and western fence lizard (*Sceloporus occidentalis*). Snakes include rubber boa (*Charina bottae*), western rattlesnake (*Crotelus atrox*), and sharp-tailed snake (*Contia tenuis*).

Ruderal/Disturbed. The ruderal/disturbed vegetative community type was identified throughout the Project site wherever disturbed soils occurred, active land uses were present, or active land uses were absent where disturbance had occurred in the recent past. Common vegetative species found in this community were composed of weedy non-native and weedy native species. Although often comprised of non-native plant species, ruderal habitats, particularly at edges of natural communities, can provide foraging habitat for many species of birds and mammals.

SPECIAL-STATUS BIOLOGICAL RESOURCES

Through a literature review and an electronic search of the CNDDB, CNPS and USFWS databases, 10 special-status wildlife species and 83 special-status plant species were identified that occur in or may be affected by project activities within the general project area. Table 1 provides a list of these special-status species, and includes a brief analysis of their potential to occur in the project site and buffer area.

Based on habitats present and the environmental conditions observed during biological surveys, Synthesis Planning, Inc. determined that 64 special-status plant species and 2 wildlife species have the potential to occur in either the proposed project site or buffer area. No special-status species have been previously documented within the boundaries of the proposed project site; however, one (1) special-status animal species and two (2) special-status plant species have been historically recorded in proximity to the proposed project site and buffer area (see Figure 3) (CDFW 2017). No special-status species were observed during biological surveys.

Pallid Bat

The ***pallid bat*** is a locally common species of low elevations in California. It occurs throughout California except for the high Sierra Nevada from Shasta to Kern Counties, and the northwestern corner of the state from Del Norte and western Siskiyou Counties to northern Mendocino County. A wide variety of habitats are occupied, including grasslands, shrublands, woodlands, and forests from sea level up through mixed conifer forests. The species is most common in open, dry habitats with rocky areas for roosting. Day roosts are in caves, crevices, mines, and occasionally in hollow trees and buildings. Roost must protect bats from high temperatures. Bats move deeper into cover if temperatures rise. Night roosts may be in more open sites, such as porches and open buildings. Few hibernation sites are known, but probably uses rock crevices. Maternity colonies form in early April, and may have a dozen to 100 individuals. Males may roost separately or in the nursery colony. Pallid bats require water, but has a good urine-concentrating ability. This species prefers rocky outcrops, cliffs, and crevices with access to open habitats for foraging.

This species may forage intermittently within the project site and buffer area. Potential roosting habitat was observed within the project site and buffer area (numerous trees). No individual pallid bats were observed in the proposed project site or buffer area during surveys. This species has not been documented as occurring in the project area (see Figure 3) (CDFW 2017).

California Giant Salamander

California giant salamanders are year-round residents of north-central California, from southern Santa Cruz County to extreme southern Mendocino and Lake Counties. They occur up to 6,500 feet primarily in humid coastal forests, especially in Douglas fir, redwood, red fir, and montane and valley-foothill riparian habitats. They live in or near streams in damp forests, and California giant salamanders tend to be common where they occur. Aquatic adults and larvae are found in cool, rocky streams and occasionally in lakes and ponds. Terrestrial adults search for prey such as snails, slugs, other invertebrates, small mice, shrews, possibly reptiles, and other amphibians under surface objects and in tunnels underground. Aquatic adults and larvae eat aquatic invertebrates, fish, and other amphibians. Aquatic adults and larvae hide within spaces between rocks in streambeds. Terrestrial adults are found under surface litter and in tunnels underground. Eggs are laid during spring in concealed locations several feet below the surface in cold, slowly flowing water in springs, channels, under streambanks, and beneath rocks and coarse woody debris in stream bottoms. This species breeds from March to May, with peak in May. Adults have been found associated with nests. Where permanently flowing streams are available, adults may retain gills for an aquatic adult stage (neoteny). In some areas, larvae will transform to terrestrial adult form after 1 to 2 years.

Potentially present. Potential aestivation habitat for this species was observed within the proposed project site and buffer area. No potential aquatic breeding habitat was observed within the proposed project site or buffer area. No potential aestivation burrow sites were observed within the project site or buffer area during biological surveys. No sign of this species was observed during biological surveys. This species has been documented approximately 1.00 miles southwest of the proposed project site. (CDFW 2017) (see Figure 3).

Incidental Wildlife

Animal species observed during biological surveys are listed in Table 2. Plant species identified are discussed in the text of the report. Avian species protected under the Federal Migratory Bird Treaty Act were observed during biological surveys (see Table 2). In the event that migratory birds become established in the project site or buffer area prior to project implementation, avoidance measures are included as recommendations in this report.

SPECIAL-STATUS PLANTS

Based on literature and database reviews, 83 special-status plant species were determined to have potential to occur within the general project area. Of these 83 species, 64 were determined to have the potential to occur within the proposed project site and buffer area. Surveys were conducted within the blooming period of 7 of these 64 plant species:

- Slender silver moss
- Cleveland's milk-vetch
- Pappose tarplant
- Woolly-headed lessingia
- Redwood lily
- Green monardella
- Napa bluecurls

None of these 7 special-status plant species were observed during the course of our botanical surveys. Potential habitat for the remaining 57 special-status plant species is present within the proposed project site and buffer area. In order to verify the presence or absence of these 57 plant species, additional plant surveys will need to be conducted prior to project implementation. Mitigation for special-status plant species is described further later in this report.

Table 2
List of Animal Species Observed During Biological Surveys

Scientific name	Common name
Corvus corax	Common raven
Passer domesticus	House sparrow
Sceloporus occidentalis	Western fence lizard
Zenaida macroura	Mourning dove

ANALYSIS OF POTENTIAL IMPACTS

Potential Impacts to Common Wildlife and Plant Populations from Project Activities

Direct mortality or injury to common wildlife and plant populations could occur during ground disturbance activities associated with implementation of the project. Small vertebrate, invertebrate, and plant species are particularly prone to impact during project implementation because they are much less to non-mobile, and cannot easily move out of the path of project activities. Other more mobile wildlife species, such as most birds and larger mammals, can avoid project-related activities by moving to other adjacent areas temporarily. Increased human activity and vehicle traffic in the vicinity may disturb some wildlife species. Because common wildlife species found in the project area are locally and regionally common, potential impacts to these resources are considered less than significant. Therefore, no avoidance or minimization measures are proposed at this time.

Potential Impacts to Special-Status Plant Populations from Project Activities

Implementation of the proposed project could potentially result in impacts on endangered, threatened, rare, or other special-status plant species located in the proposed project disturbance zone and areas immediately adjacent. Direct impacts to individual plants or populations of special-status plants could result from direct disturbance during grading activities. Impacts to

special-status plants would result from direct crushing during grading activities. Individual and populations of special-status plant species could also be affected by construction equipment if it travels outside of defined construction work zones. Impacts to individual or populations of special-status plant species would be considered a significant impact. However, with the implementation of the mitigation measures, project impacts would be reduce to a less than significant impact.

Potential Impacts to Nesting Special-Status Avian Species from Project Activities

Implementation of the proposed project could potentially impact individual and nesting migratory birds and raptor species should they become established within the proposed project site or buffer area prior to project implementation. Impacts to these species could occur through crushing by construction equipment during implementation of project activities. Actively nesting birds could also be affected due to noise and vibration from project activities, if nests are located close enough to project activities. Project related noise and vibration could cause the abandonment of active nest sites. Impacts to these species would be considered significant. In the event that nesting birds become established in the proposed project site or buffer area, avoidance and minimization measures to protect these species from potential impacts are described further in the ***Proposed Avoidance, Minimization, and Mitigation Measures*** section.

Potential Impacts to Pallid Bats from Project Activities

Implementation of the proposed project could potentially impact pallid bat maternity sites if these species are present in the project site or buffer area during implementation of the project and if they have established maternity or roosting sites. Impacts to pallid bat maternity/roost sites would occur primarily from noise and vibration created from project construction equipment and construction related activities. Noise and vibration could lead to this bat species abandoning established roost/maternity sites. Direct mortality of this species could also occur if this species is present in any trees that are removed during project activities. Impacts to this species would be considered significant. In the event that bat roost/maternity sites become established in the proposed project site or buffer area prior to project implementation, avoidance and minimization measures to protect these species from potential impacts are described further in the ***Proposed Avoidance, Minimization, and Mitigation Measures*** section.

Potential Impacts to California Giant Salamander from Project Activities

Implementation of the proposed project has the potential to result in direct impacts to California giant salamander should they be present in the proposed project site during project activities. No individuals of this species were observed during biological surveys. Direct impacts to individuals of these species could result from ground disturbance activities during project implementation. These species could be directly impacted by crushing by construction equipment. These impacts could result in direct mortality of individuals or small populations of these species. In order to reduce potential impacts to these species to a less than significant level, mitigation measures will be implemented.

PROPOSED AVOIDANCE/MINIMIZATION AND MITIGATION MEASURES

Implementation of the following avoidance/minimization and mitigation measures is recommended to avoid or reduce potential impacts to special-status wildlife and plant species:

1. Environmental Awareness Training shall be presented to all personnel working in the field on the proposed project site. Training shall consist of a brief presentation in which biologists knowledgeable of endangered species biology and legislative protection shall explain endangered species concerns. Training shall include a discussion of special-status plants and sensitive wildlife species. Species biology, habitat needs, status under the Endangered Species Act, and measures being incorporated for the protection of these species and their habitats shall also be discussed.

2. As close to the beginning of project activities as possible, but not more than 14 days prior, a qualified biologist shall conduct a final pre-construction survey of the proposed project site and buffer area to verify that no special-status wildlife species have become established in the project site or buffer area. A qualified biologist shall be present immediately prior to project activities that have potential to impact sensitive species to identify and protect potentially sensitive resources.

3. Project site boundaries shall be clearly delineated by stakes and /or flagging to minimize inadvertent degradation or loss of adjacent habitat during project operations. Staff and/or its contractors shall post signs and/or place fence around the project site to restrict access of vehicles and equipment unrelated to drilling operations.

4. If ground disturbing activities occur during the breeding season of migratory avian or raptor species (February through mid-September), surveys for active nests will be conducted by a qualified biologist no more than 10 days prior to start of activities. Pre-construction nesting surveys shall be conducted for nesting migratory avian and raptor species in the project site and buffer area. Pre-construction biological surveys shall occur prior to the proposed project implementation, and during the appropriate survey periods for nesting activities for individual avian species. Surveys will follow required CDFW and USFWS protocols, where applicable. A qualified biologist will survey suitable habitat for the presence of these species. If a migratory avian or raptor species is observed and suspected to be nesting, a buffer area will be established to avoid impacts to the active nest site. Identified nests should be continuously surveyed for the first 24 hours prior to any construction-related activities to establish a behavioral baseline. If no nesting avian species are found, project activities may proceed and no further mitigation measures will be required. If active nesting sites are found, the following exclusion buffers will be established, and no project activities will occur within these buffer zones until young birds have fledged and are no longer reliant upon the nest or parental care for survival.

    - Minimum no disturbance of 250 feet around active nest of non-listed bird species and 250 foot no disturbance buffer around migratory birds;

- Minimum no disturbance of 500 feet around active nest of non-listed raptor species;
- and 0.5-mile no disturbance buffer from listed species and fully protected species until breeding season has ended or until a qualified biologist has determined that the birds have fledged and are no longer reliant upon the nest or parental care for survival.
- Once work commences, all nests should be continuously monitored to detect any behavioral changes as a result of project activities. If behavioral changes are observed, the work causing that change should cease and the appropriate regulatory agencies (i.e. CDFW, USFWS, etc.) shall be consulted for additional avoidance and minimization measures.
- A variance from these no disturbance buffers may be implemented when there is compelling biological or ecological reason to do so, such as when the project area would be concealed from a nest site by topography. Any variance from these buffers is advised to be supported by a qualified wildlife biologist and is recommended that CDFW and USFWS be notified in advance of implementation of a no disturbance buffer variance.

5. A qualified biologist familiar with the identification of California giant salamander and red-bellied newt will conduct pre-construction surveys for their presence. The search area will encompass a 50-foot radius around all work sites. Should any individuals of these species be observed, they will be relocated by the qualified biologist to similar habitats just outside the project work areas.

6. Pre-activity surveys will be conducted for pallid bat, Townsend's big-eared bat, and hoary bat and their roosting/maternity sites in the project site and buffer area. No potential roosting/maternity habitat was observed within the proposed project site or buffer area. The project proponent shall implement the following mitigation measures to avoid significant impacts to bat roosting and maternity sites:

    - Tree snags shall not be removed without first being surveyed by a qualified bat biologist, 2-4 weeks prior to planned tree removal to determine whether bats are roosting inside the trees. If no roosting is observed, the snag shall be removed within 1 week following surveys. If bat roosting activity is observed, limbs not containing cavities, as identified by the bat biologist, shall be removed first, and the remainder of the tree removed the following day. The disturbance caused by limb removal, followed by one night interval, will allow bats to abandon the roost.

    - Large trees (<24" dbh), or trees with cavities shall be removed between September 1 and October 30. This time period is after young are volant (flying), but before expected onset of topor (winter inactivity). Smaller trees may be removed at any time.

    - If trees larger than 24" dbh, or trees with cavities must be removed outside this time period, night emergence surveys should be conducted by a qualified bat biologist, 2-4 weeks prior to planned tree removal to determine whether bats are roosting inside the

trees. If no roosting is observed, the tree should be removed within 1 week following surveys. If bat roosting activity is observed, limbs not containing cavities, as identified by the bat biologist, shall be removed first, and the remainder of the tree removed the following day. The disturbance caused by limb removal, followed by one night interval, will allow bats to abandon the roost.

7. A qualified botanist shall conduct special-status plant surveys within and immediately adjacent to the zones that will be disturbed by construction work for the 57 plant species with flowering periods outside of the botanical survey conducted on September 20, 2017. The surveys shall be conducted in the year within which construction is to commence. To the extent allowed under the construction schedule, these surveys will be conducted during the flowering period of the special status plants that have a high potential to occur within the project study area. If any special status plant species are observed within or adjacent to the disturbance zones, the project proponent shall implement the following measures:

    - A qualified botanist shall delineate the locations of any special status plant population adjacent to the disturbance zones, and shall supervise the installation of temporary protective construction fencing between the disturbance zones and the plant population. The fencing shall remain in place until construction is completed and all construction equipment removed from the vicinity of the plant population.

    - If any special status plant population is identified within the construction disturbance zones, the project proponent shall consult with CDFW and other appropriate regulatory agencies to determine appropriate avoidance and/or mitigation measures for impacts to the population. If the special status plant is federally listed as Threatened or Endangered, the project proponent shall also consult with USFWS. At a minimum, avoidance and mitigation measures shall entail the following:

        - The project proponent shall adjust the boundaries of the disturbance zones, where feasible, to avoid impacts to the plant population.

        - Where avoidance is not feasible, the project proponent shall implement one or more of the following measures, based on the prior consultation with CDFW and other regulatory agencies: (1) transplant affected plants to suitable habitat areas outside the disturbance zones; (2) collect and properly store seeds of affected plants; subsequently re-seed suitable habitat areas outside the disturbance zones; (3) prepare and implement a long-term management/enhancement plan for existing off-site populations of the affected plant species.

8. A project representative shall establish restrictions on project-related traffic to approved project areas, storage areas, staging and parking areas via signage. Off-road traffic outside of designated project site shall be prohibited.

9. Project-related traffic shall observe a 15 mph speed limit in the project site except on County roads and State and federal highways to avoid impacts to special-status and common wildlife species.

10. Hazardous materials, fuels, lubricants, and solvents that spill accidentally during project-related activities shall be cleaned up and removed from the project as soon as possible according to applicable federal, state and local regulations.

11. All equipment storage and parking during site development and operation shall be confined to the proposed project site or other offsite previously disturbed areas.

12. All excavated steep-walled holes or trenches in excess of three (3) feet in depth shall be provided with one or more escape ramps constructed of earth fill to prevent entrapment of endangered species or other animals. Ramps shall not be less than 45-degree angles. Trenches shall be inspected for entrapped wildlife each morning prior to onset of project activities and immediately prior to the end of each working day. Before such holes or trenches are filled they shall be inspected thoroughly for entrapped animals. Any animals discovered shall be allowed to escape voluntarily without harassment before project activities related to the trench resume, or removed from the trench or hole by a qualified biologist and allowed to escape unimpeded.

13. All food-related trash items such as wrappers, cans, bottles or food scraps generated during project activities shall be disposed of only in closed containers and regularly removed from the proposed project site. Food items may attract wildlife species onto the proposed project site, consequently exposing such animals to increased risk of injury or mortality. No deliberate feeding of wildlife shall be allowed.

CONCLUSION

Special-status species and their habitat have been documented in the general vicinity of the proposed project sites. However, no special-status animal or plant species were observed during the biological survey and assessment of the project site or buffer area.

Direct mortality or injury to common wildlife and plant populations could occur during site preparation activities, greenhouse structure construction, or access roadway construction. Because common wildlife species found in the project area are locally and regionally common, potential impacts to these resources are considered less than significant. Therefore, no avoidance or minimization measures are proposed at this time.

Implementation of the proposed project could potentially impact individual special-status plant species or populations should they become established within the proposed project site and buffer area prior to project implementation. Impacts to these species would be considered significant. In the event that special-status plant species are present or become established in the proposed project site, avoidance and minimization measures to protect these species from potential impacts are described further in the ***Proposed Avoidance, Minimization, and Mitigation Measures*** section.

Implementation of the proposed project could potentially impact individual and nesting avian species (including special-status species) should they become established within the proposed project site and buffer area prior to project implementation. Impacts to these species would be considered significant. In the event that nesting birds are present or become further established in the proposed project site, avoidance and minimization measures to protect these species from potential impacts are described further in the ***Proposed Avoidance, Minimization, and Mitigation Measures*** section.

Implementation of the proposed project has the potential to impact potential foraging habitat of protected bat species. Impacts to foraging habitat are considered less than significant as an abundance of such habitat is found throughout the immediate and general project area. No active or potential roosting/maternity sites of these species were observed within the proposed project sites or buffer areas during biological surveys, nor were any bat species observed. In the event that nesting bats are present or become further established in the proposed project site, avoidance and minimization measures to protect these species from potential impacts are described further in the ***Proposed Avoidance, Minimization, and Mitigation Measures*** section.

Implementation of the proposed project has the potential to result in direct impacts to California giant salamander and red-bellied newt should they be present in the proposed project site during project activities. No individuals of these species were observed during biological surveys. Direct impacts to individuals of these species could result from ground disturbance activities during project implementation. These species could be directly impacted by crushing by construction equipment. These impacts could result in direct mortality of individuals or small populations of these species. In order to reduce potential impacts to these species to a less than significant level, mitigation measures will be implemented.

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APPENDIX A
REPRESENTATIVE PHOTOGRAPHS

Photograph 1
Proposed project site. View looking east at proposed east (large) greenhouse site.

Photograph 2
Proposed project site. View looking north at proposed west (small) greenhouse site.

Photograph 3
Proposed project site. View looking north at prosed improved parking area.

Photograph 4
Existing access road. View looking west from proposed project site.