Appendix F-1
Biological Resources Assessment

Honor Rancho Compressor Modernization

Biological Resources Assessment

prepared for

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Table of Contents

Figures

Tables

Appendices

1 Introduction

Caskey Biological Consulting, LLC (Caskey) prepared this Biological Resources Assessment to document the existing conditions for the SoCalGas Honor Rancho Compressor Modernization Project (Project) and evaluate the potential for Project-related impacts to sensitive biological resources.

The purpose of this document is to provide technical information on the Project Site and survey buffers (Study Area), and to review the Project Site to determine to what extent the Project may impact special-status species and sensitive natural communities.

1.1 Project Location

The Project Site is located within the approximately 700-acre Honor Rancho Storage Facility (Facility). The Facility is south of the community of Castaic east of the Newhall Ranch Road and Interstate-5 intersection. The northern portion of the Facility is within the County of Los Angeles and the southern portion within the City of Santa Clarita, California. Regionally, the Project Site is in the northern portion of Los Angeles County (Figure 1). The approximate center of the Project Site within the Facility is at latitude 34.44511°N and longitude -118.58771°W (WGS84) (Figure 2). The Project Site is depicted on the *Newhall, California* United States Geological Survey (USGS) 7.5-minute topographic quadrangle (Figure 3). The Project Site is at elevations ranging between approximately 325 and 385 meters (m) above mean sea level (msl).

1.2 Project Description

The modernized facility would include the following replacement equipment subject to South Coast AQMD permitting:

- Four compressor gas lean-burn engines, each rated at approximately 5,000 HP, with post-combustion emission control systems
- One aboveground 8,000-gallon aqueous urea storage tank

Ancillary equipment would also be installed, including the following equipment not subject to permitting by the South Coast AQMD:

- Two EDCs, each approximately 5,500 HP
- Hydrogen generation, storage, blending, and dispensing equipment
- Green hydrogen fueling station for company vehicles
- Microgrid comprising electric generation sources, as well as an energy storage system (ESS) and a solid oxide fuel cell (SOFC) system to generate electricity to support auxiliary and administrative electrical loads while reducing the need for onsite combustion engine electricity generation
- Compression support equipment, including cooling towers, lube oil system, tanks,

Figure 1 - Regional Map

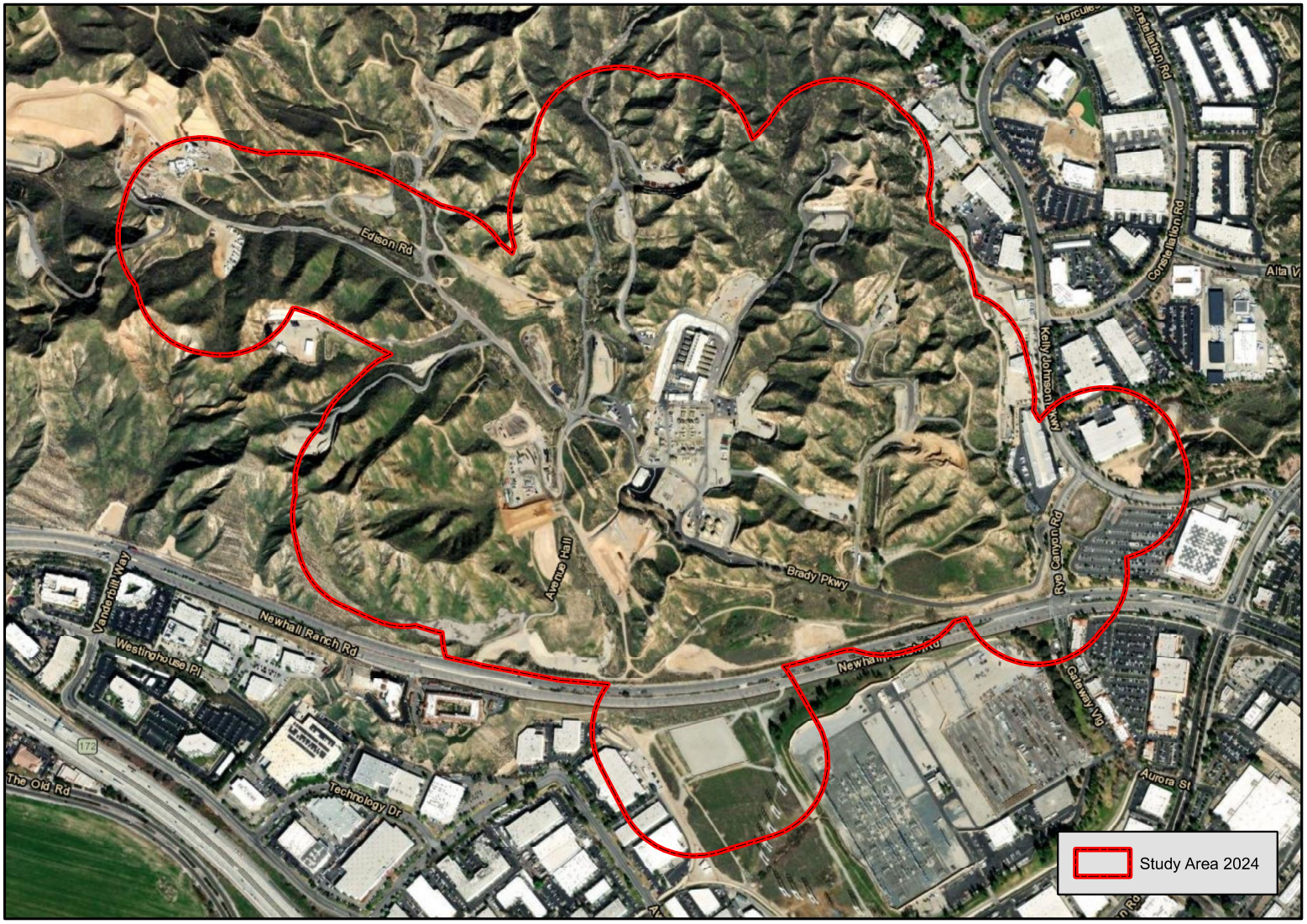

Figure 2 - Study Area Map

2 Methodology

2.1 Database and Literature Review

Prior to conducting the field surveys, thorough literature review and records searches were conducted to determine which special-status biological resources may potentially occur on or within the vicinity of the survey area. Previous special-status plant and wildlife species occurrence records within the USGS *Newhall* quadrangle and surrounding eight quadrangles were determined through queries of the U.S. Fish and Wildlife Service (USFWS) Information for Planning and Consultation system (IPaC; USFWS 2023), CDFW California Natural Diversity Database (CNDDB, CDFW 2023a), and the California Native Plant Society (CNPS) Online Inventory of Rare and Endangered Plants (CNPS 2023a). All federally- and state-listed, fully protected species (FP), Species of Special Concern (SSC), Watch List (WL), and plants with a California Rare Plant Ranking (CRPR) of 1-4 that could be present based on the record search were evaluated. Species were not discussed if there is no record of occurrence or the species has been extirpated within five miles of the proposed action area. The results from these scientific database queries were compiled into a table provided in Appendix A and Figures 5-7. In addition to the above sources, Caskey reviewed aerial imagery depicting the Project Site (Google Earth 2023), the *Newhall*, California USGS 7.5-minute topographic quadrangle (USGS 2023), the Web Soil Survey (United States Department of Agriculture, Natural Resources Conservation Service [USDA NRCS] 2023), Calflora What Grows Here (Calflora 2023), and other available background information.

2.2 Regulatory Overview

Regulated or sensitive biological resources studied and analyzed herein include special-status plant and animal species, nesting birds and raptors, and sensitive plant communities. Regulatory authority over biological resources is shared by federal, state, and local authorities.

2.2.1 Special-Status Plant Species and Communities

- Species listed or proposed for listing as threatened or endangered under the federal Endangered Species Act (FESA);
- Species listed or candidates for listing as rare, threatened, or endangered under the California Endangered Species Act (CESA) or Native Plant Protection Act (NPPA);
- Plant species with a California Rare Plant Rank (CRPR) of 1-4; and
- Sensitive Natural Communities under CDFW (2023b) and California Native Plant Society (CNPS).

2.2.2 Special-Status Wildlife Species

For the purposes of this report, special-status species include:

- Species listed or proposed for listing as threatened or endangered under the federal Endangered Species Act (FESA);
- Species listed or candidates for listing as rare, threatened, or endangered under the California Endangered Species Act (CESA);
- Species designated as Fully Protected (FP) by Fish and Game Code Sections 3511, 4700, 5050, and 5515;
- Species identified as Species of Special Concern (SSC) by the California Department of Fish and Wildlife (CDFW);
- Species designated as Watch List (WL) by the CDFW;
    - WL defined as taxa that were previously designated as SSC, but no longer merit that status, or which do not yet meet SSC criteria, but for which there is a need for additional information to clarify status (CNDDB, 2023b); and
- Avian species protected by the Migratory Bird Treaty Act (MBTA) and the Bald and Golden Eagle Protection Act.

2.3 Field Survey

Caskey Principal Biologist, Jason Caskey and Senior Biologist, Tim Searl conducted a site visit and field survey on February 24, 2021. Subsequent surveys were conducted in Spring 2022, 2023, and 2024. The Study Area, measuring approximately 438.06 acres, included the anticipated area of disturbance and a 500-foot buffer. Temperatures ranged from 45 to 90 degrees Fahrenheit and wind ranged from 0 to 12 miles per hour. Pedestrian survey areas for the Project included all areas where disturbance may occur. Laydown areas are entirely disturbed/developed and would be used for equipment storage, materials storage, parking, and other temporary activities in support of the Project construction. No ground disturbance would occur at these sites. They are currently paved or compacted dirt and gravel, and used for miscellaneous purposes, including temporary storage of materials or equipment. The potential for presence of sensitive biological resources, including sensitive plant and animal species, sensitive plant communities, and habitat for nesting birds protected by federal and state laws were evaluated. Representative photos from the site visits are provided in Appendix B. During the survey, an inventory of all plant and animal species observed was compiled and is provided in Appendix C.

Assessments for the potential occurrence of special-status species are based upon known ranges, habitat preferences for the species, species listed in the USFWS IPaC consultation report, species occurrence records within 9-topographic quadrants of the Study Area from the CNDDB, and the survey results of the Study Area. The potential for each special-status species to occur in the Study Area were evaluated according to the following criteria:

- **Absent.** Few or none of the habitat components meeting the species requirements are present (foraging, breeding, cover, substrate, elevation, hydrology, plant community, site

history, disturbance regime), and/or the majority of habitat on and adjacent to the site is unsuitable or of very poor quality, no documented CNDDB species occurrences within five miles of project, or documented occurrence is extirpated or species would have been identified on-site during biological surveys (focused-level, protocol-level, or otherwise), if present. The species is not likely to be found on the site.

- **Unlikely to Occur**. Some of the habitat components meeting the species requirements are present, and/or only some of the habitat on or adjacent to the site is unsuitable. The species has a low probability of being found on the site.
- **Likely to Occur.** All of the habitat components meeting the species requirements are present and/or most of the habitat on or adjacent to the site is highly suitable. The species has a moderate to high probability of being found on the site.
- **Present.** Species is observed on the site or has been recorded (e.g., CNDDB, other reports) on the site recently (within the last five years).

3 Existing Site Conditions

This section summarizes the results of the literature review and biological resource assessment. Discussions regarding the general environmental setting, vegetation communities present, plants and animals observed, potential special-status species issues, and other possible constraints regarding the biological resources within the Study Area are presented below. Representative photographs of the Study Area are provided in Appendix B and a complete list of all plant and animal species observed on site during the field survey is provided in Appendix C.

The Study Area is located primarily within the limits of Santa Clarita, California, with just a small portion in unincorporated Los Angeles County, east of the Newhall Ranch Road and Interstate-5 intersection. In 2017, the Rye Fire burned a total of 6,049 acres between Castaic and Santa Clarita, including much of the Study Area and adjacent areas. The Study Area still shows signs of recovery throughout. Land uses in and around the Study Area consist of an active natural gas compressor station, an active electrical substation and electrical transmission and distribution lines, commercial office buildings, and residential areas.

3.1 Vegetation Communities

Vegetation communities and land cover types in the Study Area include ruderal/coastal sage scrub, ruderal grasslands, and developed/disturbed, which contain areas of sparse to no vegetation (Table 1) (Figure 3). For a full list of vegetation observed during the field survey, please refer to Appendix C.

- **Bush mallow scrub**: This community was located on north-facing slope in the western portion of the Study Area and consisted of a homogenous stand of chaparral bush mallow (*Malacothamnus fasciculatus*).
- **Bush mallow scrub/Ruderal**: This mixed community was located in the northern portion of the Study Area and consisted of codominant chaparral bush mallow and ruderal areas of dense introduced grasses and forbs. The dominant introduced species were ripgut grass (*Bromus diandrus*), slender wild oat (*Avena barbata*), red brome (*Bromus rubens*), wall barley (*Hordeum murinum*), red-stemmed filaree (*Erodium cicutarium*), black mustard (*Brassica nigra*), and tocalote (*Centaurea melitensis*). Native annuals, such as California poppy (*Eschscholzia californica*) and miniature lupine (*Lupinus bicolor*), were also common throughout the ruderal areas in the Study Area during field surveys in the early spring of 2023.
- **California brittlebush scrub**: This community is located in the southwest portion of the Study Area on an east facing slope. This land cover is dominated by California brittlebush (*Encelia californica*).
- **California buckwheat/brittlebush scrub:** This community is located in the southwest portion of the Study Area on a northeast facing slope. This land cover is co-dominated

(*Eriogonum fasciculatum*) by California buckwheat (and California brittlebush (*Encelia californica*).

- **California sagebrush scrub**: Two small, isolated patches of this community were located in the northeastern portion of the Study Area and consisted of a homogenous stand of California sagebrush (*Artemisia californica*).
- **California sagebrush scrub/Ruderal**: This mixed community was located in the northern portion of the Study Area and consisted of a homogenous stand of California sagebrush (*Artemisia californica*) with an open canopy with an understory of dense introduced grasses and forbs consisting primarily of the ruderal species listed above.
- **Chamise chaparral**: This community was present in the eastern portion of the Study Area on a steep north-facing slope above a paved road. Chamise (*Adenostoma fasciculatum*) was dominant with associate species primarily consisting of chaparral bush mallow, deerweed (*Acmispon glaber*), California buckwheat (*Eriogonum fasciculatum*), purple sage (*Salvia leucophylla*), and blue elderberry (*Sambucus nigra* subsp. *caerulea*) though those were sparse.
- **Chamise chaparral/Deerweed scrub**: This community was primarily present in the eastern portion of the Study Area on north-facing slopes. The eastern half of the Study Area appeared to sustain less fire damage, or less fire intensity, than the western portion from the recent most recent fire. Though this was the case, the majority of the chamise present consisted of resprouts. chamise and deerweed, an early successional species in chaparral/sage scrub habitats, were codominant throughout with little understory exposed.
- **Chamise chaparral/Ruderal**: This community was primarily present in the western portion of the Study Area on north-facing slopes. The chamise chaparral was in recovery from the recent fire and consisted of an open canopy with the understory consisting of dense ruderal habitat. Ruderal areas consisted of non-native, weedy vegetation such as ripgut grass (*Bromus diandrus*), slender wild oat (*Avena barbata*), red brome (*Bromus rubens*), wall barley (*Hordeum murinum*), red-stemmed filaree (*Erodium cicutarium*), black mustard (*Brassica nigra*), and tocalote (*Centaurea melitensis*) dominant.
- **Coyote brush scrub (Planted)**: This community was present in the southern portion of the Study Area along Newhall Ranch Road. It was artificial in that it was planted and irrigated and primarily consisted of coyote brush (*Baccharis pilularis*).
- **Deerweed scrub**: This community was primarily present throughout the Study Area and occurred in small patches. Deerweed was dominant and dense with very little of the understory exposed.
- **Deerweed scrub/Ruderal**: This mixed community was the second-most abundant vegetation community within the Study Area. It consisted of a mix of deerweed and ruderal habitat described above.
- **Developed**: This land cover consisted of developed areas and included paved main facility and paved roads. It also included hardscape such as concrete storm control facilities and bank stabilization. Some ornamental plants, such as gum trees (*Eucalyptus* spp.), were included in this area within the main facility.

- **Disturbed**: This land cover consisted of gravel pads, active construction sites, and unpaved roads/shoulder areas.
- **Eucalyptus**: This non-native community was present in the central portion of the Study Area and consisted of single-strand of planted gum trees.
- **Mulefat thickets**: A small patch of mulefat (*Baccharis salicifolia* subsp. *salicifolia*) was present in a low-lying area in the southern portion of the Study Area. No evidence of long-duration ponding was observed in the area. A few coyote brush, two blue elderberry, and a single valley oak (*Quercus lobata*) were also present. The surrounding area consisted of ruderal habitat of dense black mustard.
- **Ornamental**: This land cover consisted of a mix of planted and irrigated ornamental vegetation above Brady Parkway in the eastern portion of the Study Area. The plants present primarily consisted pine (*Pinus* spp.) and acacia (*Acacia* spp.). A few native plants were also present such as chamise, deerweed, and coyote brush.
- **Red shank/California buckwheat/deerweed:** This community is located east of Kelly Johnson Parkway and is not on the Honor Rancho property. The community is located on a northwestern facing slope with a few red shank (*Adenostoma sparsifolium*) trees with interspersed California buckwheat and deerweed.
- **Ruderal**: Non-native, weedy ruderal habitat was the dominant vegetation land cover within the Study Area. The dominant plant species present included those previously described above of ripgut grass, slender wild oat, red brome, wall barley, red-stemmed filaree, black mustard, and tocalote. A few native species were also present and sparsely scattered throughout but were not dense or extensive enough to map individually. This included the occasional deerweed, chamise, purple sage, California buckwheat, chaparral bush mallow, and in two locations in the western portion of the Study Area, toyon (*Heteromeles arbutifolia*).
- **White Sage/California Sagebrush Scrub** This community is located in the southwest portion of the Study Area on a northwest facing slope. This land cover is co-dominated by white sage (*Salvia apiana*) and California sagebrush (*Artemisia californica*).

According to the CDFW Natural Communities list, none of the communities listed above are considered sensitive, however, the White Sage/California Sagebrush Scrub is listed as vulnerable by the State (CDFW 2024).

Table 1 - Vegetation Communities and Land Cover Types within the Study Area

Vegetation Community/ Cover Types	Acreage	Global/State Sensitivity[1]
Bush mallow scrub	2.66	G4/S4
Bush mallow scrub/Ruderal	2.74	-/-
California brittlebush scrub	1.51	G5/S4
California buckwheat/brittlebush scrub	1.49	G5/S5

California sagebrush scrub	0.64	G5/S5
California sagebrush scrub/Ruderal	0.75	-/-
Chamise chaparral	2.35	G5/S5
Chamise chaparral/Deerweed Scrub	9.53	G5/S5
Chamise chaparral/Ruderal	13.23	G5/S5
Coyote brush scrub (planted)	0.53	G5/S5
Deerweed scrub	5.19	G5/S5
Deerweed scrub/Ruderal	71.69	G5/S5
Developed	82.81	-/-
Disturbed	60.46	-/-
Eucalyptus	0.40	-/-
Mulefat thickets	0.30	G4/S4
Ornamental	7.99	-/-
Red shank/California buckwheat/deerweed	1.88	G4/S4
Ruderal	169.04	-/-
White Sage/California Sagebrush Scrub	2.85	G4/S3
Total	**438.06**	

[1]G5 = demonstrably secure within and outside of California; S5 = demonstrably secure within California
G4= apparently secure within and outside of California; S4 = apparently secure within California; S3 = vulnerable within California

3.2 Soils

The USDA NRCS Web Soil Survey depicts two soil units within the Study Area: Castaic-Balcom silty clay loams, 30 to 50 percent slopes, eroded, soil map unit and the Metz loam, 2 to 5 percent slopes, somewhat excessively drained soil map unit (Figure 4).

Castaic-Balcom (CmF2), silty clay loams, **30 to 50 percent slopes** is a well-drained soil that occurs on hillsides and slopes. This soil type derives from residuum weathered from sedimentary rock and has a typical soil profile of silty clay loam to 26-inches. The soil contains a non-saline to very slightly saline content (0.0 to 2.0mmhos/cm) (USDA NRCS 2023).

Metz loam, 2 to 5 percent slopes (MgB), is a somewhat excessively drained soil that occurs on alluvial fans and flood plains. The soil type is derived from alluvium and has a typical soil

profile of loam to 10-inches and stratified sand to loamy sand from 10 to 60-inches. The soil contains a non-saline to slightly saline content (0.0 to 2.0mmhos/cm) (USDA NRCS 2023).

Mocho sandy loam, 0 to 2 percent slopes (MoA) is a well-drained alluvium soil derived from sedimentary rock. The depth to the restrictive feature and water table was generally more than 80-inches. According to the NRCS, the frequency of ponding is none. MoA was not rated as a hydric soil.

Hanford sandy loam, 2 to 9 percent slopes (HcC) is a well-drained alluvium derived from granite and has a typical soil profile of sandy loam to 8-inches and a fine sandy loam from 8 to 70-inches. The soil contains a non-saline to slightly saline content (0.0 to 2.0mmhos/cm) and is not rated as a hydric soil (USDA NRCS 2024).

3.3 Observed Wildlife

Five special-status species were observed within the Study Area during the biological resource assessment: Southern California rufous-crowned sparrow (*Aimophila ruficeps canescens)* (CDFW WL), least Bell's vireo (*Vireo bellii pusillus*) (Federal and State endangered), Swainson's Hawk (*Buteo swainsoni*) (State Endangered), Vaux's Swift (*Chaetura vauxi*) (CDFW SSC), and Cooper's Hawk (*Accipiter cooperi*) (CDFW WL). Other avian species, including common raven (*Corvus corax*), mourning dove (*Zenaida macroura*), red-tailed hawk (*Buteo jamaicensis*), and California quail (*Callipepla californica*), were observed within the ruderal/coastal sage scrub areas adjacent to developed areas of the compressor station. The red-tailed hawks were observed to have an active nest near the compressor station building in an electrical transmission line tower in 2021, however, that nest is now abandoned and inactive. Additional wildlife species observed during the site visit include desert cottontail rabbit (*Sylvilagus audubonii*) and western side-blotched lizard (*Uta stansburiana elegans*). Abundant signs of active California ground squirrel (*Spermophilus beecheyi*) burrows were observed within the Study Area. The burrows were identified as California ground squirrel based on direct observation of usage by the species. See Appendix C for a full list of species observed.

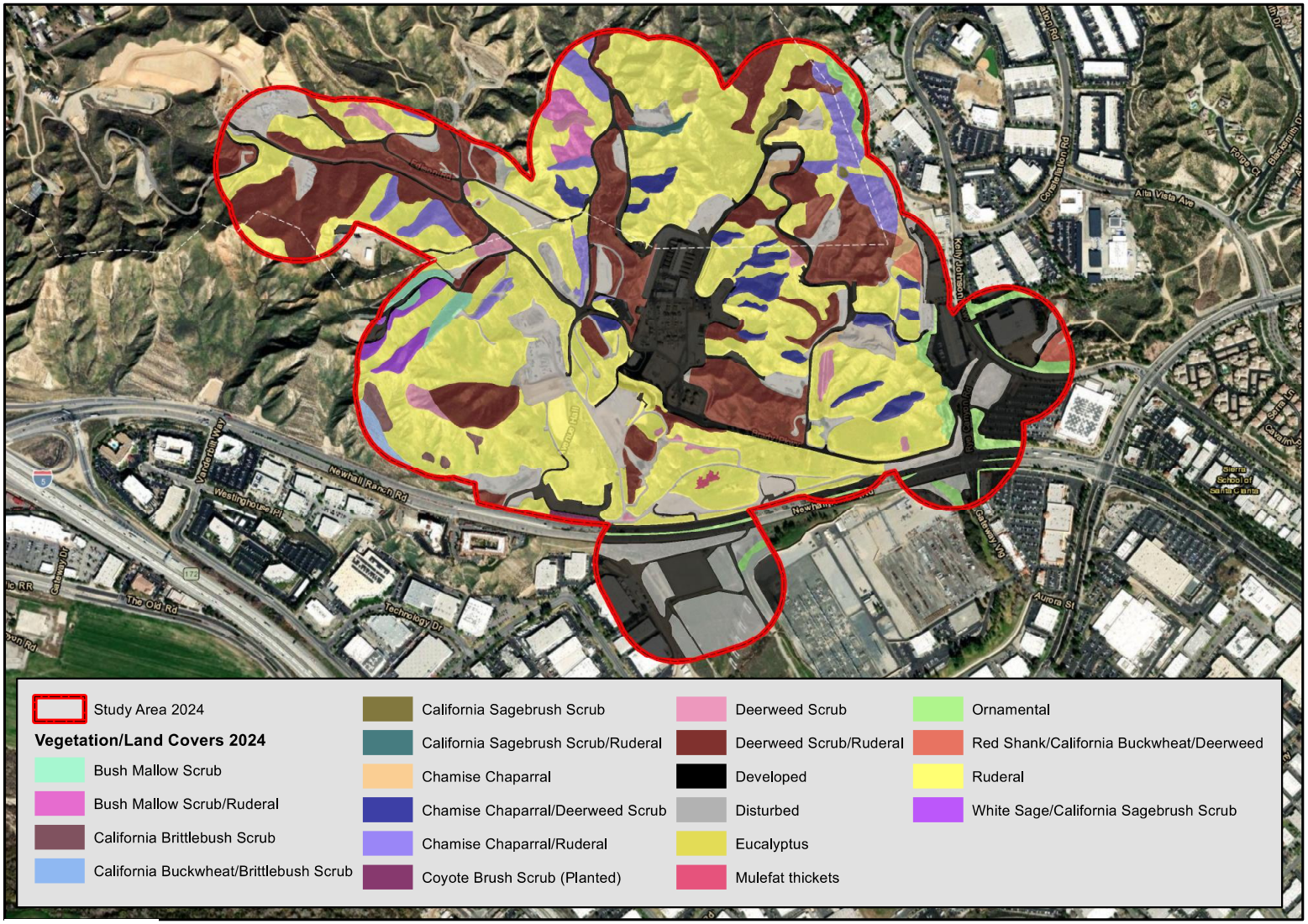

Figure 3 - Vegetation/Land Covers Map

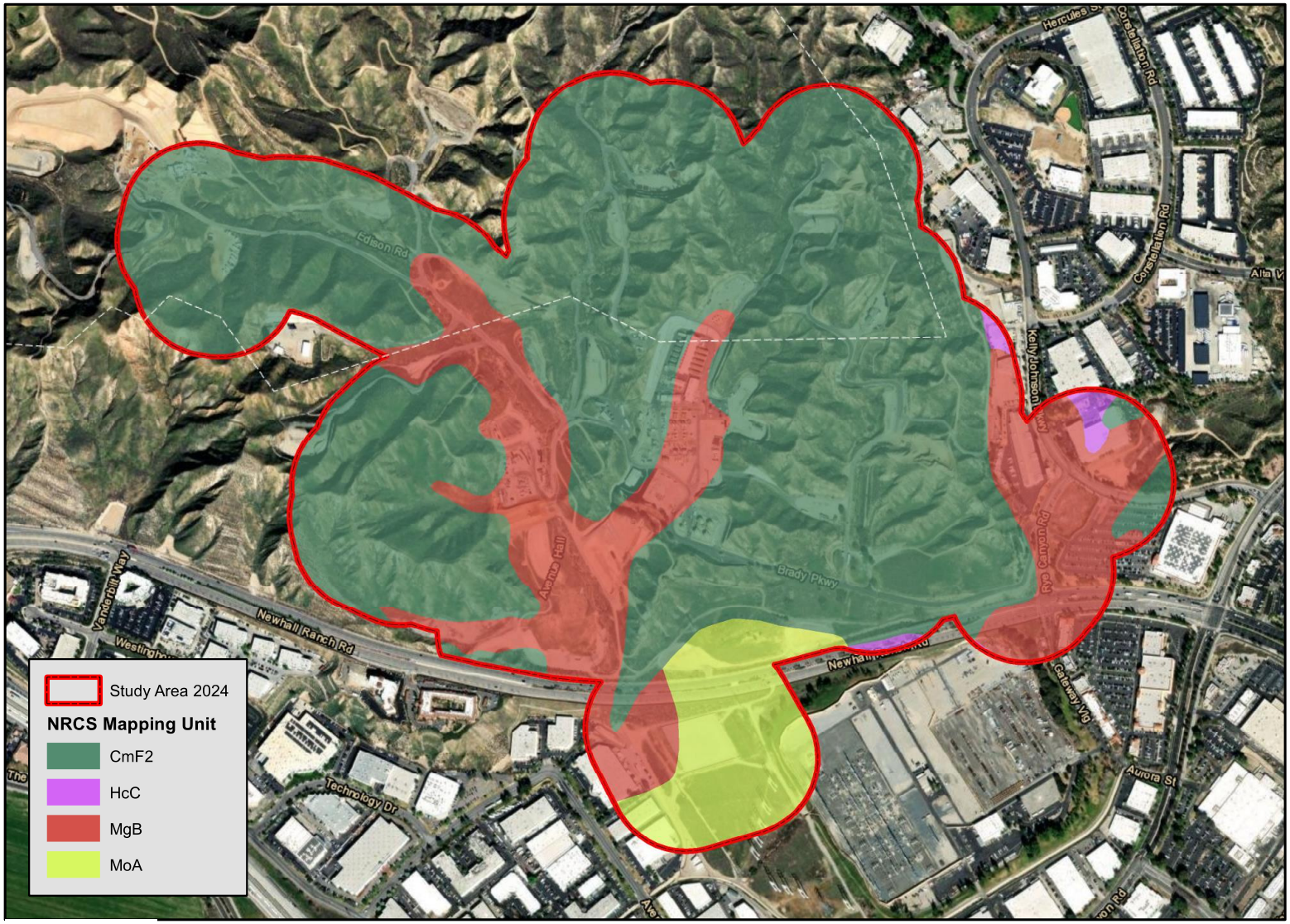

Figure 4 - NRCS Soils Map

4 Results

This section discusses the findings of the biological assessment conducted within the Study Area. The criteria used to evaluate potential Project-related impacts to biological resources are presented in Section 2.3. For a complete evaluation of all species with a potential to occur, please refer to Appendix A.

4.1 Special-Status Species

4.1.1 Special-Status Plant Species

According to the CNDDB and CNPS nine-quadrant search, 49 special-status plant species are known to or have the potential to occur within the vicinity of the Study Area (Appendix A) and; therefore, were included in the assessment. One additional species were identified by the USFWS IPaC system. Of the 50 species reviewed, the following nine 1B and 2B designated plant species have the potential to occur based on recent species records and the presence of suitable habitat.

- Slender-horned spineflower (*Dodecahema leptoceras*), federally and State-endangered, CRPR 1B.1
- San Fernando Valley spineflower (*Chorizanthe parryi* var. *fernandina*), State endangered, CRPR 1B.1
- Santa Susana tarplant (*Deinandra minthornii*), CRPR 1B.2
- Payne's bush lupine (*Lupinus paynei*), CRPR 1B.1
- Slender mariposa-lily (*Calochortus clavatus* var. *gracilis*), CRPR 1B.2
- Davidson's bush-mallow (*Malacothamnus davidsonii*), CRPR 1B.2
- Ojai navarretia (*Navarretia ojaiensis*), CRPR 1B.1
- Parry's spineflower (*Chorizanthe parryi* var*. parryi*), CRPR 1B.1
- Mesa horkelia (*Horkelia cuneate* var. *puberula*), CRPR 1B.1

The following species have a likely potential to occur and are discussed in detail below:

Slender Mariposa-Lily

The slender mariposa-lily (CRPR 1B.2) is a perennial, bulbiferous herb most often found in chaparral, coastal scrub, and valley and foothill grasslands within gravelly soils at an elevation ranging between 320m and 1,000m. This small, yellow flower is endemic to California and typically blooms between March and June, generally occurring within an elevation range from 320-1000 meters. According to the CNDDB, there have been numerous observations of the species within a five-mile radius of the Study Area as recently as 2019. Although the habitat within the Study Area is suitable for this species, the habitat assessment was conducted

outside of the blooming period making identification of the species difficult. Considering the potentially suitable habitat observed within the Study Area and the recent documented observations near the Study Area, this species is considered likely to occur.

San Fernando Valley Spineflower

The San Fernando Valley spineflower (State Endangered, CRPR 1B.1) is an annual herb most often found in coastal scrub and valley and foothill grasslands within sandy soils. This California endemic species contains small white flowers typically blooming between April and July and generally within an elevation range from 150-1220 meters (CNPS 2015). According to the CNDDB, there have been numerous observations of the species within a five-mile radius of the Study Area, with the most recent in 2011. The 2011, CNDDB record is from 1.5 miles to the west of the Study Area and has similar rolling hill topography and soils (Castaic-Balcom silty clay loams, 30 to 50 percent slopes, eroded, soil map unit) as found in the Study Area. While most all of the habitat components are present within the Study Area, the habitat assessment was conducted outside of the blooming period making identification of the species difficult. Considering the correct habitat components are present within the Study Area and the numerous documented observations, this species is considered likely to occur. Based on this assessment, focused presence/absence surveys were conducted in the Spring of 2022. There were no observations of the species during the focused surveys. For more information, please refer to Appendix D.

The following species have an unlikely potential to occur and are discussed in detail below:

Santa Susana Tarplant

Santa Susana tarplant (CRPR 1B.2) is a perennial, deciduous shrub that occurs primarily in chaparral and coastal scrub with rocky soils at an elevation typically between 280m and 760m. This shrub with small yellow flowers is endemic to California and typically blooms between July and November. While many of the required habitat components exist within the Study Area, there have been no observations documented in the CNDDB within a five-mile radius and none were observed during the habitat assessment. Considering all factors above, it is unlikely that this species would be found in the Study Area.

Payne's Bush Lupine

Payne's bush lupine (CRPR 1B.1) is a perennial shrub that grows within a variety of habitats including coastal scrub and valley and foothill grasslands most often in sandy soils at an elevation ranging between 220m and 420m. This shrub has purple flowers and blooms between March and June. Many of the habitat requirements for this species were observed to be within the Study Area; however, there were no observations of this species during the habitat assessment. There have been no documented observations within 5 miles of the Study Area, but the species is documented within the 9-quad search. Therefore, this species is considered unlikely to occur.

Davidson's Bush-mallow

Davidson's bush-mallow (CRPR 1B.2) is a perennial, deciduous shrub generally found in chaparral, coastal scrub, and riparian woodlands within sandy and rocky soils at an elevation

ranging between 185m and 1,140m. This California endemic shrub has pink flowers, blooms from June to January, and occurs between 185 meters and 1,140 meters. During the habitat assessment, a bush-mallow identified as chaparral bush-mallow (*Malacothamnus fasciculatus*) was observed in the Study Area. Additionally, there have not been any documented observations within a five-mile radius of the Study Area. With the general habitat requirements being present, but no documented observations within the near vicinity, this species is considered unlikely to occur.

Ojai Navarretia

Ojai navarretia (CRPR 1B.1) is an annual herb most often occurring in openings within chaparral, coastal scrub, and valley and foothill grasslands at an elevation ranging between 275m and 620m. This native herb has small white flowers with purple dots near the center, blooms between May and July, and typically grows in clay soils. The Study Area does contain openings in coastal scrub with clay soils that could be considered suitable for the species. However, there have been no documented observations in the CNDDB within five miles of the Study Area. Although many of the habitat components were observed onsite, there have been no documented observations in the nearby vicinity; therefore, this species can be considered unlikely to occur.

Parry's Spineflower

Parry's spineflower (CRPR 1B.1) is an annual herb found within openings in chaparral, coastal scrub, and valley and foothill grasslands at an elevation ranging between 275m and 1,220m. This small, endemic herb blooms white flowers between April and June within sandy and rocky soils. The Study Area does contain openings in coastal scrub with sandy soils that could be considered suitable for the species. There have been no documented observations in the CNDDB within five miles of the Study Area. Although many of the habitat components were observed within the Study Area, there have been no documented observations in the nearby vicinity; therefore, this species can be considered unlikely to occur.

Slender-horned Spineflower

Slender-horned spineflower (Federally Endangered, State Endangered, CRPR 1B.1) is an annual herb native and endemic to California that occurs primarily in chaparral and coast scrub at an elevation ranging between 200m and 760m. This herb blooms small, white flowers between April and June within sandy soils. Many of the habitat components for this species were observed to be present within the Study Area. However, according to the CNDDB, there has not be a documented observation within five miles of the Study Area. While the habitat is correct for this species, there have been no documented observations and thus this species can be considered unlikely to occur.

Mesa Horkelia

Mesa Horkelia (CRPR 1B.1) is a perennial herb that is native and endemic to California and is mostly observed in chaparral and coastal scrub habitats at elevation ranging between 70m and 810m. This small herb blooms white flowers between February and July and grows within sandy soils. The Study Area does contain coastal scrub with sandy soils that could be considered suitable for the species. There have been no documented observations in

CNDDB of this species within five miles of the Study Area. Given that potentially suitable habitat was observed in the Study Area, but there have been no documented observations of the species in the near vicinity, this species can be considered unlikely to occur.

4.1.2 Special-Status Wildlife Species

According to the CNDDB nine-quadrant search, 47 special-status wildlife species are known to or have the potential to occur within the vicinity of the Study Area (Appendix A) and; therefore, were included in the assessment. This includes nine species that the USFWS IPaC had identified as having the potential to occur within the Study Area. Of the 47 species reviewed, 15 special-status species have the potential to occur within the Study Area based on the presence of suitable habitat and documented observations.

- Cooper's hawk (*Accipiter cooperii*), CDFW WL
- California horned lark (*Eremophila alpestris actia*), CDFW WL
- Loggerhead shrike (*Lanius ludovicianus*), CDFW SSC
- Bell's sage sparrow (*Artemisiospiza belli belli*), CDFW WL
- Grasshopper sparrow (*Ammodramus savannarum*), CDFW SSC
- Coastal California gnatcatcher (*Polioptila californica californica*), Federally threatened, CDFW SSC
- Least Bell's vireo (*Vireo bellii pusillus*), Federally and State endangered
- Burrowing owl (*Athene cunicularia*) CDFW SSC
- White-tailed kite (*Elanus leucurus*), CDFW FP
- Swainson's hawk (*Buteo swainsoni*), CDFW WL
- Praire falcon (*Falco mexicanus*), CDFW WL
- Coast horned lizard (*Phrynosoma blainvillii*), CDFW SSC
- Coastal whiptail (*Aspidoscelis tigris stejnegeri*), CDFW SSC
- American badger (*Taxidea taxus*), CDFW SSC
- Western spadefoot (*Spea hammondii*), CDFW SSC

The following avian species have a likely potential to occur and are discussed in detail below:

Cooper's Hawk

The Cooper's hawk is a medium sized raptor that is listed as a CDFW SSC. While this species prefers forest and woodlands, they are often seen in parks, neighborhoods, and back yards utilizing large trees in flat areas for nesting. During the habitat assessment, a Cooper's hawk was observed flying overhead, however, it never landed within the Study Area. Any future potential for the species to occur is likely limited to flyovers as the site is lacking many of the qualities needed for nesting and foraging.

Bell's Sage Sparrow

Bell's sage sparrow is a CDFW WL species that most frequently inhabits mostly drier, inland coastal sagebrush and chamise chaparral. This medium-sized sparrow is a sub-species of the Bell's sparrow and generally nests in shrubs, but occasionally is observed to nest on the ground. Many of the habitat qualities this species prefers were observed throughout the Study Area and there have been documented observation of the species within five miles as recently as 2015; however, this species was not observed during the habitat assessment. Considering many of the preferred habitat components for this species were observed during the habitat assessment and there have been relatively recent observations documented in the CNDDB, this species has a high probability of being found on site and is likely to occur.

The following avian species have an unlikely potential to occur and are discussed in detail below:

California Horned Lark

California horned lark is a CDFW WL species that inhabits open terrain, grasslands, agricultural fields, and prairies. Horned lark nest on bare ground, either in a natural depression or in one that is excavated by the female. The southwest section of the Study Area does contain a flat, open terrain comprised of mainly ruderal grasslands. According to the CNDDB, this species was last documented within five miles of the Study Area in 2008. Although some of the habitat components meeting the species requirements are present on and adjacent to the Study Area, the species has a low probability of being found on the site and is unlikely to occur.

Loggerhead Shrike

Loggerhead shrike is a CDFW SSC that inhabits savannah; pinyon-juniper; Joshua tree and riparian woodlands; desert oases, scrub, and washes. It prefers open country for hunting, with perches for scanning, and fairly dense shrubs and brush for nesting. There is potentially suitable nesting and foraging habitat within the Study Area for this species although it was not observed during the habitat assessment. According to CNDDB records, the loggerhead shrike was last observed within five miles of the Study Area in 2008. While some of the habitat components were observed within the Study Area, this species has a low probability of being found onsite and is unlikely to occur.

Coastal California Gnatcatcher

The coastal California gnatcatcher is a small, gray songbird listed as federally threatened and a CDFW SSC. This species may be found in open, low growing sage scrub with California sagebrush as a dominant or co-dominant species. The populations are more abundant near sage scrub-grassland interface than where sage scrub grades into chaparral. Dense sage scrub tends to be occupied less frequently than more open sites. Coastal California gnatcatchers have been observed foraging within chaparral and grassland communities where they occur adjacent to or intermixed with sage scrub. The Study Area does contain coastal sage scrub components recovering from the Rye Fire in 2017. Currently, these areas

are dominated by deerweed an early seral stage species that is known to recover quickly after fires within coastal sage scrub. In addition, these areas are also interspersed with ruderal grasses potentially making the area less desirable to the gnatcatchers. While the habitat components preferred by the species are present and there have been recent observations documented within the vicinity, the species has a low probability of being found on the site due to the currently low quality of the habitat and is unlikely to occur. Protocol-level surveys were conducted during the nesting season in 2021, 2022, and 2023. There were no observations of the species made during both protocol-level survey periods. For more information, please refer to Appendix E.

Least Bell's Vireo

The least Bell's vireo is a small, gray songbird listed as federally and state endangered. This species may be found in willow woodlands, stands of mule fat, brushy fields, scrub oak, coastal chaparral, and mesquite patches with dense, early successional understories. Although it inhabits riparian woodlands, it was found that individuals benefited from using both riparian and non-riparian ecosystems (Kus, et al. 2020). The Study Area does contain chaparral and sparse riparian components recovering from the Rye Fire in 2017. During the CAGN focused surveys in April 2022, biologist Tim Searl observed a lone, male least Bell's vireo in a small stand of mule fat. This chance observation prompted protocol-level surveys to commence in 2022. There were no observations of the species during the protocol-level surveys in 2022 or 2023. For more information on the survey, please refer to Appendix F.

Burrowing Owl

Burrowing owl is a CDFW SSC that frequently inhabits open, dry grasslands, deserts, and urban environments with sparse vegetation. These small owls utilize existing burrows from small mammals such as ground squirrels for their nesting and cover sites. Burrowing owls tend to feed on small mammals, lizards, and insects. There have been two observations documented in the CNDDB within five miles of the Study Area with the most recent being in 2007, however, no occupied burrows or burrowing owl sign, including pellets or whitewash, were observed within the Study Area. Considering all factors above, there is a low probability of this species being observed within the Study Area and it is unlikely to occur.

The following reptile species have a likely potential to occur and are discussed in detail below:

Coast Horned Lizard

The coast horned lizard is a CDFW SSC that prefers open areas with sparse vegetation and sandy soils most often within grasslands and chaparral. This flat bodied lizard feeds mainly on ants and is most often found around ant hills, however, they have been known to feed on other invertebrates such as spiders and beetles. This lizard is most active during warm weather and will retreat to underground burrows during periods of cold or excessive heat. Many of the preferred habitat requirements for the coast horned lizard were observed during the habitat assessment including many ant hills as potential food sources and inactive small

mammal burrows for shelter. There have been numerous observations documented in the CNDDB within five miles of the Study Area as recently as 2015. Although the species was not observed during the habitat assessment, considering all factors above, there is a high probability of this species being observed in the Study Area and it is likely to occur.

Coastal Whiptail

The coastal whiptail is a CDFW SSC that is found in a variety of habitats including grasslands and chaparral. This slim bodied lizard feeds primarily on small invertebrates such as spiders, centipedes and termites. This lizard is very quick and difficult to approach using its speed to enter into thick brush or burrows for safety. Many of the preferred habitat requirements were observed within the Study Area including food sources, inactive small mammal burrows, thick brush, and grasslands. Additionally, there have been numerous observations documented in the CNDDB within five miles of the Study Area as recently as 2016. Although the species was not observed during the habitat assessment, considering all factors above, there is a high probability of this species being observed onsite and it is likely to occur.

The following amphibian species have an unlikely potential to occur and are discussed in detail below:

Western spadefoot

Western spadefoot is a CDFW SSX that inhabits a variety of open areas including grasslands, coast sage scrub, chaparral, sandy washes, among others. While habitation does not require water, the western spadefoot does require pooled water for breeding. These pools must be absent of any bullfrogs, fish, or crayfish to successfully breed as these species will feed on the spadefoot eggs. There have been observations of this species within five miles of the Study Area. In 2024, Dudek conducted a protocol-level focused survey for the Western spadefoot and the results were negative. For more information on the survey, please refer to Appendix G.

The following mammal species have an unlikely potential to occur and are discussed in detail below:

American Badger

The American badger is a CDFW SSC that is mostly found in dry, open areas within shrublands, forests, and herbaceous habitats that contain friable soils. Badgers require sufficient food sources, feeding primarily on small mammals such as ground squirrels and cottontail rabbits. Badgers excavate their own burrows and spend most of the day underground while foraging at night. The Study Area does contain friable soils suitable for burrowing as well as sufficient food sources with an abundance of ground squirrels and cottontail rabbits observed during the survey. There has also been documented occurrence within five miles of the Study Area as recently as 2015. There were no badgers or badger sign, such as burrows, observed during the habitat assessment. There is a low probability for the species within the Study area and it is unlikely to occur.

Other Special-Status Species

The Study Area contains a low flat area with ruderal grasses that are occupied by food sources such as ground squirrels and cottontail rabbits that could be utilized by the white-tailed kite (CDFW FP), Swainson's hawk (CDFW WL), and prairie falcon (CDFW WL). Although, the remainder of the Study Areas are unlikely to be utilized by these species. Other than the area containing sparse eucalyptus, the Study Area lacks the necessary large trees that would be considered suitable for nesting. Any observations of these three species are likely to come in the form of flyovers. In addition to the aforementioned raptors, the Study Area was observed to contain components of preferred habitat for grasshopper sparrow, particularly in the southwest portion contain flat topography and ruderal grasses. However, preferred nesting areas were lacking. Considering the low-quality habitat and lack of documented observations, the proposed project would not be expected to have any impacts on these species.

4.1.3 Migratory Birds

Nesting birds are protected under CFGC and MBTA. The ruderal/coastal sage scrub habitat observed within the Study Area could be used by numerous species of nesting birds protected under CFGC. Additionally, there are numerous structures within the facility and adjacent areas that could provide nesting opportunities. The survey was conducted inside of the nesting bird season (February 15 – August 31) and suitable nesting habitat was observed to be present within the Study Area.

4.2 Sensitive Plant Communities

According to the CNDDB nine-quadrant search, 12 sensitive natural communities have been documented to occur within the vicinity of the Study Area. However, none of these sensitive natural communities were observed in the Study Area during the assessment.

4.3 Critical Habitats

The Study Area is not located within USFWS-designated critical habitat (USFWS 2023).

5 Discussion and Conclusion

This section discusses the conclusions of the literature and database review and the habitat assessment. Based on the literature and data review and the results of the habitat assessment, it is reasonable to conclude that there is potential for special-status plant and/or wildlife species to occur within the Study Area. Focused surveys for plants within their respective bloom periods is recommended to confirm presence/absence. Although the habitat quality for the California gnatcatcher was determined to be low quality due to the slow recovery of the coastal scrub community after the Rye Fire, focused protocol surveys may be warranted due to the close proximity of the most recent record in the CNDDB. The criteria used to evaluate potential Project-related impacts to biological resources are presented in Section 2.1.2.

5.1 Special-Status Species

5.1.1 Special-Status Plant Species

The Study Area contains many of the habitat requirements, including coastal scrub components, soils compositions, and elevation ranges, for nine special-status species: Santa Susana tarplant, Payne's bush lupine, slender mariposa-lily, Davidson's bush-mallow, Ojai navarretia, San Fernando Valley spineflower, Parry's spineflower, slender-horned spineflower, and mesa horkelia. Slender mariposa-lily and San Fernando Valley spineflower have multiple CNDDB observational records within 5-miles of the Study Area, with the most recent in 2019 and 2011, respectively. A focused survey for San Fernando spineflower was conducted by Caskey biologist Jason Caskey and SoCalGas biologist Blair Baker on April 16, 2021, lining up with the known bloom period for the species. A second focused survey was conducted in the Spring of 2022 by botanist Jennifer Campbell. A reference population of the San Fernando spineflower at the Las Virgenes Open Space Preserve confirmed the species to be in bloom in 2021 while a reference population at Ahmanson Ranch confirmed the species to be in bloom in 2022. Despite observations of the habitat requirements, no special-status plant species were identified during the habitat assessment or focused surveys. Please refer to the San Fernando Valley spineflower survey results report in Appendix D for more information.

5.1.2 Special-Status Wildlife Species

As discussed in Section 4.1.2, 15 special-status animal species have the potential to occur in the Study Area based upon known ranges, habitat preferences for the species, and species occurrence records in the vicinity of the Study Area, as documented in the CNDDB, IPaC, and other records. However, of the 15 special-status species, two of these species are federally and/or state-listed that could have potential to be impacted by Project-related activities: coastal California gnatcatcher and least Bell's vireo.

The Study Area is mostly dominated with ruderal species with coastal sage scrub components throughout consisting primarily of deerweed, a species that is often quick to recover from wildfire. Considering the coastal sage scrub is still recovering from the Rye Fire, the habitat would be considered low quality for the coastal California gnatcatcher within the Study Area. However, there has been observations documented in the CNDDB within approximately one mile southwest of the Project Site as recent as 2015. No individuals of this species were detected during the habitat assessment or during the 2021, 2022, and the 2023 protocol-level survey; therefore, no further protocol-level surveys are recommended. Please refer to Appendix E for more information.

Low quality habitat exists for the least Bell's vireo within the Study Area, however, there was a confirmed observation of a lone, male least Bell's vireo during the 2022 coastal California gnatcatcher protocol-level surveys. As a result of this observation, protocol-level least Bell's vireo surveys were conducted in the spring and summer of 2022 and 2023. No individuals of this species were detected during the 2022 or 2023 protocol-level surveys; therefore, no further protocol-level surveys are recommended. Please refer to Appendix F for more information.

The Study Area does contain some areas that could be considered suitable habitat for the Western spadefoot including sandy and gravelly soils within coastal sage scrub and washes. There are also sparse open grassland areas that could potentially provide habitat as well, however, there were no areas with pooled water that would be required for breeding. A protocol-level survey was conducted by qualified biologists from Dudek in spring of 2024 which yielded negative results. No further protocol-level surveys for the Western spadefoot are recommended. Please refer to Appendix G for more information.

There are areas within the Study Area that are suitable for the grasshopper sparrow, California horned lark, loggerhead shrike, and Bell's sage sparrow mainly in the form of coastal sage scrub and flat grasslands. All of these species have been documented within five miles of the Study Area.

Low quality habitat exists for the Cooper's hawk and white-tailed kite; however, both species have been documented in the CNDDB as having been observed within a five-mile radius of the Study Area. A Cooper's hawk was observed flying over the Study Area during the habitat assessment, however, with the exception of a few large eucalyptus trees near the compressor station entrance, the site is lacking potential nesting sites that would be preferred by the species. Potential observations would likely come in the form of a flyover.

Low quality habitat also exists for the burrowing owl, particularly in the flat area with ruderal grasses in the southwest portion of the Study Area. There has been a single documented observation in the CNDDB within five miles of the Study Area as recently as 2007. However, the area is likely too dense in vegetation and no previously used burrows or other sign of the species was observed during the habitat assessment.

Potentially suitable habitat for the coast horned lizard and coastal whiptail were observed within the Study Area, particularly in the southwest section where the terrain is flat with mostly ruderal grasses. Both species have numerous observations documented in the CNDDB, with the most recent in 2015 and 2016, respectively.

No other special-status species or their sign was observed during the reconnaissance survey. The analysis of potential for occurrence is based on habitat suitability and CNDDB occurrences within a five-mile radius.

5.2 Avoidance and Minimization Measures

The following avoidance and minimization measures will be implemented to avoid impacts to special-status plant and wildlife species:

1. **Implementation of a Workers Environmental Awareness Program (WEAP).** Workers will undergo a WEAP to train them on specific environmental sensitives pertinent to the Project site.

2. **Pre-Construction Clearance Survey.** Biological surveys would be conducted according to specie required protocols prior to clearances for construction.

3. **Biological Monitoring.** Professional biologist(s) would monitor activities in areas of, or close to, biological sensitivity, if necessary.

4. **Nest Buffers.** If occupied nests are identified, appropriate avoidance and minimization measures established by a qualified biologist would be implemented.

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Appendix A: Special-Status Species Evaluation Tables

Special-Status Plant Species in the Regional Vicinity of the Study Area

Scientific Name Common Name	Status Fed/State ESA CRPR Rank	Habitat Requirements	Potential to Occur	Rationale
Plants				
Allium howellii var. clokeyi Mt. Pinos onion	None/None 1B.3	Great Basin scrub, Meadows and seeps (edges), Pinyon and juniper woodland/perennial bulbiferous herb. Elevation ranges from 4265–6070m. Blooms from Apr–June.	Absent	The Study Area lacks suitable habitat for the species.
Deinandra minthornii Santa Susana tarplant	None/None 1B.2	A perennial deciduous shrub occurring in chaparral and coastal scrub within rocky soils. Found in elevations between 280-760m. Blooms Jul-Nov.	Unlikely to occur	While the soils are correct for the species, the deciduous shrub would have likely been observed during the site survey. No species were observed. According to the CNDDB, there have been no records of this species occurring within 5 miles of the Study Area.
Deinandra paniculata paniculate tarplant	None/None 4.2	Annual herb found within coastal scrub, valley and foothill grasslands and vernal pools usually within mesic or sandy soils. Elevation ranges from 25-940m. Blooms from Apr-Nov.	Absent	The Study Area lacks mesic soils near vernal pools and grasslands. According to the CNDDB, there have been no records of this species occurring within 5 miles of the Study Area.
Helianthus inexpectatus Newhall sunflower	None/None 1B.1	A perennial rhizomatous herb often found in marshes, swamps and riparian woodlands along freshwater and seeps. Blooms between Aug-Oct.	Absent	The Study Area does not contain any marshes, swamps, or riparian woodlands. No riparian vegetation was observed.

Scientific Name Common Name	Status Fed/State ESA CRPR Rank	Habitat Requirements	Potential to Occur	Rationale
Helianthus nuttallii ssp. *parishii* Los Angeles sunflower	None/None 1A	Marshes and swamps (coastal salt and freshwater)/perennial rhizomatous herb. Elevation ranges from 30–5005m. Blooms between Aug–Oct.	Absent	The Study Area lacks suitable habitat for the species.
Hulsea vestita ssp. *parryi* Parry's sunflower	None/None 4.3	Lower montane coniferous forest, Pinyon and juniper woodland, Upper montane coniferous forest; granitic or carbonate, rocky, openings/perennial herb. Elevation ranges from 4490–9500m. Blooms Apr–Aug.	Absent	The Study Area lacks suitable habitat for the species.
Pseudognaphalium leucocephalum white rabbit-tobacco	None/None 2B.2	A perennial herb found in chaparral, cismontane woodland, coastal scrub, and riparian woodland within sandy and gravelly soils. Elevation ranges from 0-2100m. Blooms Aug-Nov	Absent	The Study Area does not contain any cismontane or riparian woodland that could support the species.
Senecio aphanactis chaparral ragwort	None/None 2B.2	Annual herb occurring in chaparral, cismontane woodland and coastal scrub in alkaline soils. Elevation ranges from 15-800m. Blooms Jan-Apr.	Absent	There are no alkali soils present within the Study Area. According to the CNDDB, there have been no records of this species occurring within 5 miles of the Study Area.
Symphyotrichum greatae Greata's aster	None/None 1B.3	A perennial rhizomatous herb located in broad-leafed upland forest, chaparral, cismontane woodland, lower montane coniferous forest and riparian woodland within mesic soils. Elevation ranges from 300-2010m. Blooms Jun-Oct.	Absent	The Study Area does not contain any upland forest, woodlands, or riparian habitat that would be required to support the species. According to the CNDDB, there have been no records of this species occurring within 5 miles of the Study Area.

Scientific Name Common Name	Status Fed/State ESA CRPR Rank	Habitat Requirements	Potential to Occur	Rationale
Stylocline masonii Mason's neststraw	None/None 1B.1	Chenopod scrub, Pinyon and juniper woodland; sandy/annual herb. Elevation ranges from 325–3935m. Blooms Mar–May.	Absent	The Study Area lacks suitable habitat for the species.
Berberis nevinii Nevin's barberry	Endangered/ Endangered/ 1B.1	Chaparral, Cismontane woodland, Coastal scrub, Riparian scrub; sandy or gravelly/perennial evergreen shrub. Elevation ranges from 225–2705m. Blooms Feb–June.	Absent	This conspicuous shrub was not observed during the survey of the Study Area.
Harpagonella palmeri Palmer's grapplinghook	None/None 4.2	Annual herb often found in open grassy areas within chaparral, coastal scrub, valley and foothill grasslands in clay soils. Elevation ranges from 20-955m. Blooms Mar-May.	Unlikely to occur	The Study Area does contain open grassy areas with loamy clay soils. According to CalFlora, there has been an observation within 3-miles of the site in 2005.
Lepidium virginicum var. *robinsonii* Robinson's pepper-grass	None/None 4.3	Annual herb occurring in chaparral and coastal scrub in sandy and gravelly soils. Elevation ranges from 1-885m. Blooms Jan-Jul.	Unlikely to occur	The Study Area contains the necessary habitat, soils and elevation preferred by the species. However, there have been no records of observations in the CNDDB within 5 miles of the Study Area and the species was not observed during the site survey.
Nasturtium (*Rorippa*) *gambelii* Gambel's water cress	Endangered/ Threatened/ 1B.1	Marshes and swamps (freshwater or brackish)/perennial rhizomatous herb. Elevation ranges from 15–1085m. Blooms from Apr–Oct.	Absent	The Study Area lacks suitable habitat for the species.

Scientific Name Common Name	Status Fed/State ESA CRPR Rank	Habitat Requirements	Potential to Occur	Rationale
Streptanthus campestris southern jewelflower	None/None 1B.3	A perennial herb found in chaparral, lower montane coniferous forest and pinyon and juniper woodland in rocky soils. Elevation ranges from 900-2300m. Blooms Apr-Jul.	Absent	The Study Area is outside the known elevation ranges for this species. Likewise, the site does not contain the preferred habitat. According to the CNDDB, there have been no records of this species occurring within 5 miles of the Study Area
Opuntia basilaris var. brachyclada short-joint beavertail	None/None 1B.2	A perennial stem succulent located in chaparral, Joshua tree woodland, Mojave Desert scrub and pinyon and juniper woodland in sandy and gravelly soils. Elevation ranges from 425-1800m. Blooms Apr-Aug.	Absent	*Opuntia* sp. observed onsite, however, the Study Area is outside the known elevation ranges for this subspecies. According to the CNDDB, there have been no records of this species occurring within 5 miles of the Study Area.
Arenaria paludicola Marsh sandwort	Endangered/ Endangered/ 1B.1	Marshes and swamps (freshwater or brackish); sandy, openings/perennial stoloniferous herb. Elevations ranges from 5–560. Blooms from May–Aug.	Absent	The Study Area lacks suitable habitat for the species.

Scientific Name Common Name	Status Fed/State ESA CRPR Rank	Habitat Requirements	Potential to Occur	Rationale
Calystegia peirsonii Peirson's morning-glory	None/None 4.2	A perennial rhizomatous herb occurring in chaparral, chenopod scrub, cismontane woodland, coastal scrub, lower montane coniferous forest and valley and foothill grassland in rocky soils. Elevation ranges from 30-1500m. Blooms Apr-Jun.	Unlikely to occur	The Study Area contains the necessary habitat, soils and elevation preferred by the species. However, there have been no records of observations in the CNDDB within 5 miles of the Study Area and the species was not observed during the site survey.
Astragalus brauntonii Braunton's milk-vetch	Endangered/ None/1B.1	Chaparral, Coastal scrub, Valley and foothill grassland; recent burns or disturbed areas, usually sandstone with carbonate layers/perennial herb. Elevation ranges from 10–2100m. Blooms Jan–Aug	Absent	The Study Area lacks suitable soils for the species.
Lupinus paynei Payne's bush lupine	None/None 1B.1	A perennial shrub occurring in coastal scrub, riparian scrub, valley and foothill grasslands in sandy soils. Elevation ranges from 220-420m. Blooms Mar-Jul.	Unlikely to occur	The Study Area contains the necessary habitat, soils and elevation preferred by the species. However, there have been no records of observations in the CNDDB within 5 miles of the Study Area and the species was not observed during the site survey.
Phacelia hubbyi Hubby's phaceila	None/None 4.2	Chaparral, Coastal scrub, Valley and foothill grassland; gravelly, rocky, talus/annual herb. Elevation ranges from 0–3280m. Blooms from Apr–July	Absent	The Study Area lacks suitable soils for the species.

Scientific Name Common Name	Status Fed/State ESA CRPR Rank	Habitat Requirements	Potential to Occur	Rationale
Phacelia mohavensis Mojave phacelia	None/None 4.3	Annual herb found in cismontane woodland, lower montane coniferous forest, meadows, seeps and pinyon and juniper woodland in sandy or gravelly soils. Elevation ranges from 1400-2500m. Blooms Apr-Aug.	Absent	The Study Area is outside the known elevation ranges for this species. Likewise, the site does not contain the preferred habitat. According to the CNDDB, there have been no records of this species occurring within 5 miles of the Study Area.
Juglans californica southern California black walnut	None/None 4.2	A perennial deciduous tree occurring in chaparral, cismontane woodland, coastal scrub and riparian woodland in alluvial soils. Elevation ranges from 50-900m. Blooms Mar-Aug.	Absent	There were no observations of this species during the site survey.
Clinopodium mimuloides monkey-flower savory	None/None 4.2	Chaparral, North Coast coniferous forest; streambanks, mesic/perennial herb. Elevations ranges from 1000–5905m. Blooms from June–Oct.	Absent	The Study Area lacks suitable habitat for the species.
Lepechinia fragrans fragrant pitcher sage	None/None 4.2	A perennial shrub located in chaparral with rocky soils. Elevation ranges from 20-1310m. Blooms Mar-Oct.	Unlikely to occur	The Study Area contains the necessary habitat, soils and elevation preferred by the species. However, there have been no records of observations in the CNDDB within 5 miles of the Study Area and the species was not observed during the site survey.

Scientific Name Common Name	Status Fed/State ESA CRPR Rank	Habitat Requirements	Potential to Occur	Rationale
Lepechinia rossii Ross' pitcher sage	None/None 1B.2	A perennial shrub found in chaparral with sandy and rocky soils. Elevation ranges from 305-790m. Blooms May-Sep.	Absent	The Study Area does have sparse chaparral species, but is more broadly consided coastal scrub. There have been no records of observations in the CNDDB within 5 miles of the Study Area and the species was not observed during the site survey.
Calochortus catalinae Catalina mariposa-lily	None/None 4.2	A perennial bulbiferous herb located in chaparral, cismontane woodland, coastal scrub and valley and foothill grasslands in sandy or rocky soils. Elevation ranges from 15-700m. Blooms Feb-Jun.	Unlikely to occur	The Study Area contains the necessary habitat, soils and elevation preferred by the species. However, there have been no records of observations in the CNDDB within 5 miles of the Study Area and the species was not observed during the site survey.
Calochortus clavatus var. *clavatus* club-haired mariposa-lily	None/None 4.3	A perennial bulbiferous herb located in chaparral, cismontane woodland, coastal scrub and valley and foothill grassland with clay and rocky, serpentinite soils. Elevation ranges from 75-1300m. Blooms Mar-Jun.	Unlikely to occur	The Study Area contains the necessary habitat, soils and elevation preferred by the species. However, there have been no records of observations in the CNDDB within 5 miles of the Study Area and the species was not observed during the site survey.

Scientific Name Common Name	Status Fed/State ESA CRPR Rank	Habitat Requirements	Potential to Occur	Rationale
Calochortus clavatus var. *gracilis* slender mariposa-lily	None/None 1B.2	A perennial bulbiferous herb found in chaparral, coastal scrub and valley and foothill grasslands with gravelly soils. Elevation ranges from 320-1000m. Blooms Mar-Jun.	Likely to occur	The Study Area contains the necessary habitat, soils and elevation preferred by the species. There have been numerous observations recorded in the CNDDB as recent as 2019.
Calochortus fimbriatus late-flowered mariposa-lily	None/None 1B.3	A perennial bulbiferous herb located in chaparral, cismontane woodland and riparian woodland often in rocky, serpentinite soils. Elevation ranges from 275-1905m. Blooms Jun-Aug.	Absent	The Study Area does contain chaparral species, but does not contain any of the required woodlands that would support the species. There have been no observations recorded in the CNDDB within five miles of the Study Area. No observations of the species were made during the site survey.
Calochortus palmeri var. *palmeri* Palmer's mariposa-lily	None/None 1B.2	A perennial bulbiferous herb occurring in chaparral, lower montane coniferous forest, meadows and seeps within mesic soils. Elevation ranges from 710-2390m. Blooms Apr-Jun.	Absent	The Study Area is outside the known elevation ranges for this species. Likewise, the site does not contain the preferred habitat or soils.

Scientific Name Common Name	Status Fed/State ESA CRPR Rank	Habitat Requirements	Potential to Occur	Rationale
Calochortus plummerae Plummer's mariposa-lily	None/None 4.2	A perennial bulbiferous herb found in chaparral, cismontane woodland, coastal scrub, lower montane coniferous forest and valley and foothill grasslands in granitic, rocky soils. Elevation ranges from 100-1700m. Blooms May-Jul.	Likely to occur	The Study Area contains the necessary habitat, soils and elevation preferred by the species. There have been numerous observations recorded in the CNDDB as recent as 2007. However, no species were observed during the site survey.
Lilium humboldtii ssp. *ocellatum* ocellated Humboldt lily	None/None 4.2	A perennial bulbiferous herb located in openings in chaparral, cismontane woodland, coastal scrub, lower montane coniferous forest and riparian woodland in gravelly and rocky soils. Elevation ranges from 30-1800m. Blooms Mar-Aug.	Unlikely to occur	The Study Area contains the necessary habitat, soils and elevation preferred by the species. However, there have been no records of observations in the CNDDB within 5 miles of the Study Area and the species was not observed during the site survey.
Malacothamnus davidsonii Davidson's bush-mallow	None/None 1B.2	A perennial deciduous shrub found in chaparral, cismontane woodland, coastal scrub and riparian woodlands with sandy and rocky soils. Elevation ranges from 185-1140m. Blooms Jun-Jan.	Unlikely to occur	A bush mallow species was observed onsite, but was no identified as this subspecies. The Study Area contains the necessary habitat, soils and elevation preferred by the species. However, there have been no records of observations in the CNDDB within 5 miles of the Study Area and the species was not observed during the site survey.

Scientific Name Common Name	Status Fed/State ESA CRPR Rank	Habitat Requirements	Potential to Occur	Rationale
Castilleja gleasoni Mount Gleason paintbrush	None/Rare 1B.2	Chaparral, Lower montane coniferous forest, Pinyon and juniper woodland; granitic/perennial herb (hemiparasitic). Elevation ranges from 2180–7120m. Blooms from May–June(Sep).	Absent	The Study Area lacks suitable habitat for the species.
Canbya candida white pygmy-poppy	None/None 4.2	Annual herb occurring in Joshua tree woodland, Mojave Desert scrub and pinyon and juniper woodland in sandy, gravelly and granitic soils. Elevation ranges from 600-1460m. Blooms Mar-Jun.	Absent	The Study Area is outside the known elevation ranges for this species. Likewise, the site does not contain the preferred habitat.
Hordeum intercedens vernal barley	None/None 3.2	Annual herb typically occurring around vernal pools, saline streambeds and alkaline flats in coastal dunes, coastal scrub and valley and foothill grasslands. Elevation ranges from 5-1000m. Blooms Mar-Jun.	Absent	The Study Area does not contain any vernal pools, saline streambed, or other preferred habitats. There have been no records of observations in the CNDDB within 5 miles of the Study Area and the species was not observed during the site survey.
Orcuttia californica California Orcutt grass	Endangered/ Endangered 1B.1	Annual herb found along vernal pools with clay soils. Elevation ranges from 15-660m. Blooms Apr-Aug.	Absent	The Study Area does not contain any vernal pools or other wetland areas that would be required to support this species. No observations were made during the site visit.
Navarretia fossalis spreading navarretia	Threatened/ Endangered 1B.1	Annual herb located in chenopod scrub, marshes, swamps, playas and vernal pools in clay and alkaline soils. Elevation ranges from 30-655m. Blooms Apr-Jun.	Absent	The Study Area does not contain any vernal pools or other wetland areas that would be required to support this species. No observations were made during the site visit.

Scientific Name Common Name	Status Fed/State ESA CRPR Rank	Habitat Requirements	Potential to Occur	Rationale
Navarretia ojaiensis Ojai navarretia	None/None 1B.1	Annual herb occurring in openings within chaparral, coastal scrub and valley and foothill grassland with clay soils. Elevation ranges from 275-620m. Blooms May-Jul.	Unlikely to occur	The Study Area contains the necessary habitat, soils and elevation preferred by the species. However, there have been no records of observations in the CNDDB within 5 miles of the Study Area and the species was not observed during the site survey.
Navarretia setiloba Piute Mountains navarretia	None/None 1B.1	Annual herb found in cismontane woodland, pinyon and juniper woodland and valley and foothill grassland in clay or gravelly loam soils. Elevation ranges from 285-2100m. Blooms Apr-Jul.	Absent	The Study Area does not contain any woodlands or foothill grasslands that would be required to support the species.
Acanthoscyphus parishii var. *parishii* Parish's oxytheca	None/None 4.2	Chaparral, Lower montane coniferous forest; sandy or gravelly/annual herb. Elevation ranges from 4000–8530m Blooms from June–Sep.	Absent	The Study Area lacks suitable habitat for the species.

Scientific Name Common Name	Status Fed/State ESA CRPR Rank	Habitat Requirements	Potential to Occur	Rationale
Chorizanthe parryi var. *fernandina* San Fernando Valley spineflower	None/ Endangered 1B.1	Annual herb occurring in coastal scrub and valley and foothill grassland in sandy soils. Elevation ranges from 150-1220m. Blooms Apr-Jul.	Absent	The Study Area contains the necessary habitat, soils and elevation preferred by the species. There have been numerous observations recorded in the CNDDB as recent as 2011. A 2011 CNDDB record from 1.5 miles to the west of the Project Site has similar rolling hill topography and soils (Castaic-Balcom silty clay loams, 30 to 50 percent slopes, eroded, soil map unit) as found in the Study Area. However, 2022 focused surveys during the bloom period, and after a positive confirmation of the species blooming at a reference site, were negative.
Chorizanthe parryi var. *parryi* Parry's spineflower	None/None 1B.1	Annual herb found in openings in chaparral, cismontane woodland, coastal scrub and valley and foothill grassland in sandy or rocky soils. Elevation ranges from 275-1220m. Blooms Apr-Jun.	Unlikely to occur	The Study Area contains the necessary habitat, soils and elevation preferred by the species. However, there have been no records of observations in the CNDDB within 5 miles of the Study Area and the species was not observed during the site survey.

Scientific Name Common Name	Status Fed/State ESA CRPR Rank	Habitat Requirements	Potential to Occur	Rationale
Dodecahema leptoceras slender-horned spineflower	Endangered/ Endangered 1B.1	Annual herb located in chaparral, cismontane woodland and coastal scrub in sandy soils. Elevation ranges from 200-760m. Blooms Apr-Jun.	Unlikely to occur	The Study Area contains the necessary habitat, soils and elevation preferred by the species. However, there have been no records of observations in the CNDDB within 5 miles of the Study Area and the species was not observed during the site survey.
Delphinium parryi ssp. *purpureum* Mt. Pinos larkspur	None/None 4.3	A perennial herb found in chaparral, Mojave Desert scrub and pinyon and juniper woodland in dry, rocky soils. Elevation ranges from 1000-2600m. Blooms May-Jun.	Absent	The Study Area is outside the known elevation ranges for this species. Likewise, the site does not contain the preferred habitat. No observations were made during the site survey.
Cercocarpus betuloides var. *blancheae* island mountain-mahogany	None/None 4.3	A perennial evergreen shrub occurring in closed-cone coniferous forest and chaparral in dry, sandy and gravelly soils. Elevation ranges from 30-600m. Blooms Feb-May.	Unlikely to occur	The Study Area contains the necessary habitat, soils and elevation preferred by the species. However, there have been no records of observations in the CNDDB within 5 miles of the Study Area and the species was not observed during the site survey.

Scientific Name Common Name	Status Fed/State ESA CRPR Rank	Habitat Requirements	Potential to Occur	Rationale
Horkelia cuneata var. *puberula* mesa horkelia	None/None 1B.1	A perennial herb located in chaparral, cismontane woodland and coastal scrub in sandy or gravelly soils. Elevation ranges from 70-810m. Blooms Feb-Jul.	Unlikely to occur	The Study Area contains the necessary habitat, soils and elevation preferred by the species. However, there have been no records of observations in the CNDDB within 5 miles of the Study Area and the species was not observed during the site survey.

CRPR (CNPS California Rare Plant Rank)

1A=Presumed Extinct in California

1B=Rare, Threatened, or Endangered in California and elsewhere

2A=Plants presumed extirpated in California, but more common elsewhere

2B=Plants Rare, Threatened, or Endangered in California, but more common elsewhere

3=Review List: Plants about which more information is needed

4=Watch List: Plants of limited distribution

CRPR Threat Code Extension

.1=Seriously endangered in California (over 80% of occurrences threatened/high degree and immediacy of threat)

.2=Fairly endangered in California (20-80% occurrences threatened)

.3=Not very endangered in California (<20% of occurrences threatened)

Special Status Animal Species in the Regional Vicinity of the Project Site

Scientific Name Common Name	Status Fed/State ESA/ CDFW	Habitat Requirements	Potential to Occur	Rationale
Invertebrates				
Bombus crotchii Crotch bumble bee	None/ Candidate Endangered/ None	Coastal California east to the Sierra-Cascade crest and south into Mexico. Food plant genera include *Antirrhinum, Phacelia, Clarkia, Dendromecon, Eschscholzia,* and *Eriogonum.*	Absent	There were no preferred host plant species observed within the Study Area. According to the CNDDB records, there are no occurrences within five miles of the Study Area
Euphydryas editha quino quino checkerspot butterfly	Endangered/ None/ None	Ranges from Southern California to Baja throughout a variety of habitats including grasslands, coastal sage scrub, chamise chaparral, red shank chaparral, juniper woodland and semi desert scrub.	Absent	While the Study Area does contain coastal sage scrub, the preferred larval food vegetative species such as *Plantago* spp. were not observed during the site survey. According to the CNDDB records, there are no occurrences within five miles of the Study Area.
Crustaceans				
Branchinecta lynchi vernal pool fairy shrimp	Threatened/ None/None	Scattered throughout the Central Valley, this species inhabits vernal pools as small as a large puddle up to small lakes, but most often can be observe in grassland pools.	Absent	There are no vernal pools within the Study Area. According to the CNDDB records, there are no occurrences within five miles of the Study Area.
Streptocephalus woottoni Riverside fairy shrimp	Endangered/ None/None	Vernal pools, non-vegetated ephemeral pools	Absent	There are no vernal pools or ephemeral pools within the Study Area. According to the CNDDB records, there are no occurrences within five miles of the Study Area.
Fish				
Catostomus santaanae Santa Ana sucker	Threatened/ None/ None	Observed in streams with lowing water where gravel, rubble, and boulder substrates are present.	Absent	There are no perennial streams observed within the Study Area.

Scientific Name Common Name	Status Fed/State ESA/ CDFW	Habitat Requirements	Potential to Occur	Rationale
Gila orcuttii arroyo chub	None/None/ SSC	Most often observed in cool to warm water streams that fluctuate between large winter storm flows and low summer flows with low dissolved oxygen	Absent	There are no perennial streams observed within the Study Area.
Rhinichthys osculus Santa Ana speckled dace	None/None/ SSC	Observed in a variety of habitats including small springs and streams to deep lakes. Prefer clear, well oxygenated water with current or flows.	Absent	There are no perennial streams or lakes observed within the Study Area.
Gasterosteus aculeatus williamsoni unarmored threespine stickleback	Endangered/ Endangered/FP	Prefers shallow, slow water along the edge with varying substrates generally with adequate vegetative cover	Absent	There are no perennial streams observed within the Study Area.
Birds				
Accipiter cooperii Cooper's hawk	None/None WL	Prefers forest and woodlands, but are also often found in parks, neighborhoods, and backyards. Nesting in large trees mostly in the flats.	Present	This species was directly observed flying over the compressor station during the habitat assessment. However, nesting opportunities for the species are limited in the Study Area.
Buteo swainsoni Swainson's hawk	None/None WL	Prefers open prairie and grassland habitats. Often observed on fence posts while hunting prey in agricultural fields. Nesting occurs in scattered trees in grasslands.	Unlikely to occur	The Study Area does not contain any open prairie or grassland that would be suitable feeding areas for this species. The topography at the Study Area likely varies too much to support the species. An observation was made of a single Swainson’s, but it was a flyover.

Scientific Name Common Name	Status Fed/State ESA/ CDFW	Habitat Requirements	Potential to Occur	Rationale
Elanus leucurus white-tailed kite	None/None FP	Often observed in savannas, open woodlands, marshes, desert grasslands and agricultural fields. Nesting occurs in large trees in the open or edge of forests.	Unlikely to occur	There are open areas within the Study Area that could be used for foraging by the species. Likewise, the CNDDB does have a single observational recording within five miles of the Study area, however, the record is more than 20-years old.
Eremophila alpestris actia California horned lark	None/None WL	Favors bare ground and habitats with short, sparse vegetation including prairies, deserts and heavily grazed pastures. Nests on bare ground.	Likely to occur	There are areas within the western portion of the Study Area that are flat, sparse grasslands that could support the species.
Gymnogyps californianus California condor	Endangered/ Endangered FP	Species has been reintroduced in the mountains of southern and central California, Arizona, Utah and Baja. Forages in open grasslands. Nests in natural cavities and cliffs in forested areas up to 1800m.	Absent	There are no cliffs or natural cavities that would be considered suitable nesting sites within the Study Area. Potential occurrence would likely stem from a flyover. According to the CNDDB, there has not been an observation of this species within five miles of the Project Site.
Coccyzus americanus occidentalis western yellow-billed cuckoo	Threatened/ Endangered None	Prefers dense forest habitat with riparian areas. Typically nests in thick stands of deciduous trees along streams and rivers.	Absent	There are no riparian areas within the Study Area that would be required to support the species. According to the CNDDB, there has not been an observation of this species within five miles of the Project Site.

Scientific Name Common Name	Status Fed/State ESA/ CDFW	Habitat Requirements	Potential to Occur	Rationale
Falco mexicanus prairie falcon	None/None WL	Observed in a variety of open habitats including grasslands, deserts and prairies that support small prey species. Typically nests in well protected cliff ledges including alpine habitat up to 3300m.	Unlikely to occur	There are no cliffs or natural cavities that would be considered suitable nesting sites within the Study Area. Potential occurrence would likely stem from a flyover. According to the CNDDB, there has not been an observation of this species within five miles of the Project Site.
Riparia riparia bank swallow	None/ Threatened None	Species lives in low-lying riparian habitats with open areas for foraging. Nests are built in colonies of up to 2000 nests, located in vertical banks and cliffs.	Absent	There are no riparian areas within the Study Area that would be required to support the species. According to the CNDDB, there has not been an observation of this species within five miles of the Project Site.
Icteria virens yellow-breasted chat	None/None SSC	Found in areas of low, dense vegetation along forest edges, farm fields and riparian habitats. Nests in dense vegetation such as blackberry bushes.	Absent	The Study Area does not contain forest edges or riparian habitats. Likewise, no dense vegetation required for nesting was observed. According to the CNDDB, there has not been an observation of this species within five miles of the Project Site.
Lanius ludovicianus loggerhead shrike	None/None SSC	Prefers open habitats including desert scrub, chaparral and savannahs. Frequently observed along roadsides and fence lines. Nests in thorny vegetation to deter predation.	Likely to occur	The Study Area contains some open grassland and chaparral-like scrub. There are numerous fences and posts for perching and impaling prey. There have been observations recorded in the CNDDB within five miles of the Study Area, although no observations were made during the site survey.

Scientific Name Common Name	Status Fed/State ESA/ CDFW	Habitat Requirements	Potential to Occur	Rationale
Setophaga petechia yellow warbler	None/None SSC	Observed in thick vegetation in a variety of habitats including dry scrub and forests. Nesting frequently occurs in bushes or small trees near riparian areas.	Absent	The Study Area does contain areas of thick vegetation in dry scrub, but is lacking any forests or riparian areas. According to the CNDDB, there has not been an observation of this species within five miles of the Project Site.
Aimophila ruficeps canescens southern California rufous-crowned sparrow	None/None WL	Typically found on dry, rocky, open hillsides consisting of grasses and scattered shrubs. Nests are built on the ground and concealed under grass, leaves or rocks.	Present	This species was observed in abundance within the Honor Rancho Station during all survey years.
Ammodramus savannarum grasshopper sparrow	None/None SSC	Species lives in grasslands, prairies and open areas with little to no cover. Nests on the ground in clumps of grass.	Unlikely to occur	The southwestern portion of the Study Area does contain an open grassland area; however, the area is dense with ruderal grasses and shrubs and unlikely to be preferred by the species. According to the CNDDB, there has not been an observation of this species within five miles of the Project Site.
Artemisiospiza belli belli Bell's sage sparrow	None/None WL	Observed in scrubland habitats such as coastal sagebrush, chaparral and desert scrub. Nests mainly in shrubs, but occasionally on the ground.	Likely to occur	The Study Area contains the necessary habitat requirements for the species and according to the CNDDB, there has been an observation of the species made within five miles. However, no species were observed during the site survey.

Scientific Name Common Name	Status Fed/State ESA/ CDFW	Habitat Requirements	Potential to Occur	Rationale
Polioptila californica californica coastal California gnatcatcher	Threatened/ None SSC	Species occurs along the coast in highly fragmented habitat dominated by coastal sage scrub. Nests in sagebrush, often in gullies or drainages.	Absent	The habitat in the surrounding areas of the Study Area does contain potentially suitable habitat for the species albeit low quality. The Study Area is located on the far northeast edge of the known range. According to the CNDDB, there have been multiple observations documented within five miles of the Study Area as recently as 2015. Focused protocol-level surveys in 2021, 2022, and 2023 all were negative.
Athene cunicularia burrowing owl	None/None SSC	Located in open areas with sparse vegetation including deserts, grasslands and urban environments. Nesting occurs in areas with high burrow densities associated with high mammal populations.	Unlikely to occur	There is an open grassland area within the southwestern portion of the Study Area; however, no suitable burrows or observations of the species were made during the site survey. There have been two observations documented in CNDDB within five miles as recently as 2007.
Vireo bellii pusillus least Bell's vireo	Endangered/ Endangered None	Found almost entirely in dense shrubs and trees in riparian woodland habitats in southern California. Nests in dense foliage in drainages.	Unlikely to occur	There are no riparian areas within the Study Area that would be required to support the species. According to the CNDDB, there have been multiple observations documented within five miles of the Study Area as recently as 2016. A lone male was observed in 2022 which prompted action via protocol-level surveys. The focused surveys in 2022 and 2023 were negative.

Scientific Name Common Name	Status Fed/State ESA/ CDFW	Habitat Requirements	Potential to Occur	Rationale
Amphibians				
Anaxyrus californicus arroyo toad	Endangered/ None SSC	Species has extremely specific habitat requirements including exposed sandy stream banks for burrowing. Also requires quiet pools with sandy bottoms for breeding.	Absent	The Study Area does not include sandy stream banks with quiet pools that would be required for the species. There has been one observation documented in CNDDB within five miles, although the record is over 25 years old.
Rana boylii foothill yellow-legged frog	None/ Endangered SSC	Prefers rocky streams and rivers with open, sunny banks. Found in forests, chaparral and woodlands. Eggs are laid in shallow, slow moving water.	Absent	Study Area does not contain any aquatic habitats that would be considered suitable habitat for the species. There have been no observations documented in CNDDB within five miles of the Study Area.
Rana draytonii California red-legged frog	Threatened/ None SSC	This highly aquatic species inhabits quiet pools of streams, marshes, and occasionally ponds.	Absent	Study Area does not contain any aquatic habitats that would be considered suitable habitat for the species. There have been no observations documented in CNDDB within five miles of the Study Area.
Rana muscosa southern mountain yellow-legged frog	Endangered/ Endangered WL	Prefers large clear pools up to 3ft deep. Observed in lakes, ponds, streams and in rocky narrow canyons with sunny banks.	Absent	Study Area does not contain any aquatic habitats that would be considered suitable habitat for the species. There have been no observations documented in CNDDB within five miles of the Study Area.
Spea hammondii western spadefoot	None/None SSC	Inhabits open areas with sandy or gravelly soils in forests, grasslands, coastal sage scrub, chapparal, river floodplains and mountains. Breeding occurs after heavy rains in shallow pools.	Absent	Study Area does not contain any aquatic habitats that would be considered suitable breeding habitat for the species. There have been multiple observations documented within five miles of the Project Site as recently as 2019. A focused protocol survey was conducted in 2024 and the results were negative

Scientific Name Common Name	Status Fed/State ESA/ CDFW	Habitat Requirements	Potential to Occur	Rationale
Taricha torosa Coast Range newt	None/None SSC	Terrestrial species that becomes aquatic while breeding. Found in chaparral, forests and grasslands. Breeding occurs in stream pools and ponds.	Absent	Study Area does not contain any aquatic habitats that would be considered suitable habitat for the species. There have been no observations documented in CNDDB within five miles of the Study Area.
Reptiles				
Actinemys marmorata western pond turtle	None/None SSC	Located in ponds, lakes, rivers, streams and marshes with dense vegetation. Require exposed banks for basking and nesting.	Absent	There are no aquatic habitats in the Study Area that would be considered suitable habitat for the species.
Anniella spp. Northern California legless lizard	None/None SSC	Species found in moist, loose soil under leaf litter, rocks and downed logs. Present in beach dunes, chaparral, woodlands, desert scrub and sandy stream banks.	Absent	The Study Area does not contain any areas with down logs or leaf piles within an area of high moisture. No observations of the required habitat or species were observed.
Arizona elegans occidentalis California glossy snake	None/None SSC	Patchily distributed from the eastern portion of San Francisco Bay, southern San Joaquin Valley, and the Coast, Transverse, and Peninsular ranges, south to Baja California. Generalist reported from a range of scrub and grassland habitats, often with loose or sandy soils.	Unlikely to Occur	The Study Area contains loose sandy soils. A CNDDB occurrence has been documented within five miles of the Study Area, however the record is dated to 1946 (CDFW 2020). No species or sign were observed during the assessment.
Aspidoscelis tigris stejnegeri coastal whiptail	None/None SSC	Found along the southern California coast from Los Angeles into Mexico usually in open areas of chaparral, forests and riparian areas with sparse vegetation	Likely to occur	While the Study Area is lacking riparian areas, there are open areas particularly in the southwest portion. There have also been multiple observations documented in the CNDDB within five miles of the Project area as recently as 2016.

Scientific Name Common Name	Status Fed/State ESA/ CDFW	Habitat Requirements	Potential to Occur	Rationale
Phrynosoma blainvillii coast horned lizard	None/None SSC	Prefers open areas with sparse vegetation and sandy soils. Found in grasslands, coniferous forests and chaparral. Frequently observed feeding near ant hills.	Likely to occur	There are areas of sparse vegetation particularly in the southwest portion of the Study Area. There have been multiple observations documented in the CNDDB within five miles of the Project Site as recently as 2015.
Salvadora hexalepis virgultea coast patch-nosed snake	None/None SSC	Occurs along the southern California coast in chaparral and coastal scrublands in canyons, rocky hillsides and plains. Burrows in loose soils.	Absent	The Study Area does not contain any of the loose sandy soils required by the species. There have been no observations documented in CNDDB within five miles of the Study Area.
Thamnophis hammondii two-striped gartersnake	None/None SSC	Found along the coast of southern California in woodlands, coastal scrub and chaparral, usually near water sources.	Absent	There were no water sources observed within Study Area that would be required by the species. Likewise, the Study Area is not along the coast where this species is generally found. There have been no observations documented in CNDDB within five miles of the Study Area.
Mammals				
Neotoma lepida intermedia San Diego desert woodrat	None/None SSC	Occurs in areas of chaparral, sagebrush and desert scrub in southern California. Uses sticks, twigs, rocks and other plant materials to build middens.	Unlikely to occur	While there are areas of sagebrush that could be utilized by this species, no middens or other sign of the woodrat was observed during the site assessment. There have been no observations documented in CNDDB within five miles of the Study Area.

Scientific Name Common Name	Status Fed/State ESA/ CDFW	Habitat Requirements	Potential to Occur	Rationale
Onychomys torridus ramona southern grasshopper mouse	None/None SSC	Typically observed west of the San Gabriel and San Bernardino mountains from LA County to Mexico. Inhabits open areas with sparse vegetation including coastal sage, chaparral and grasslands.	Unlikely to occur	The Study Area is located west of the San Gabriel and San Bernardino mountain ranges and within coastal sage scrub. However, there have been no observations documented in CNDDB within five miles of the Study Area.
Lepus californicus bennettii San Diego black-tailed jackrabbit	None/None SSC	Species lives in dry, short grass habitats including grasslands, agricultural fields and coastal scrub. Typically nests under shrubs or brush in shallow depressions.	Unlikely to occur	While many of the habitat requirements were observed for this species, there were none observed during the site assessment. Likewise, there have been no observations documented in CNDDB within five miles of the Study Area.
Taxidea taxus American badger	None/None SSC	Most abundant in drier open stages of most shrub, forest, and herbaceous habitats, with friable soils. Needs sufficient food, friable soils and open, uncultivated ground. Preys on burrowing rodents. Digs burrows.	Unlikely to occur	The Study Area does contain open areas with soils that could be suitable for burrowing as well as sufficient food sources in the form of ground squirrels and cottontail rabbits. However, no burrows or species sign was observed. There has been one observation documented in the CNDDB within five miles as recently as 2015.
Eumops perotis californicus western mastiff bat	None/None SSC	Species is only found in areas with rock features like caves, cracks and crevices that offer roosting habitat. Roosts can also be located in cracks in buildings. Observed foraging in the open in chaparral, coastal sage, desert washes, grasslands and ponderosa pine forests. Typically roosts in colonies.	Absent	The Study Area does not contain any caves, cracks, crevices or other rocky areas suitable for roosting. There have been no observations documented in CNDDB within five miles of the Study Area.

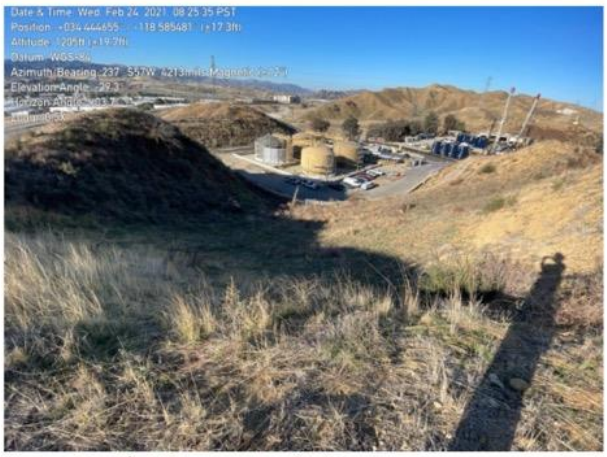
Scientific Name Common Name	Status Fed/State ESA/ CDFW	Habitat Requirements	Potential to Occur	Rationale
Macrotus californicus California leaf-nosed bat	None/None SSC	Inhabits desert ecosystems in southern California under 600m including along the Colorado River. Typically roosts in deep mine shafts and caves. Occasionally observed in buildings or bridges.	Absent	The Study Area is lacking desert ecosystem, caves, mineshafts, and other key habitat requirements for the species. There have been no observations documented in CNDDB within five miles of the Study Area.
Antrozous pallidus pallid bat	None/None SSC	Common at low elevations in dry open areas of grasslands, chaparral and forests. Roosts in rocky areas such as caves and mines during the day, while moving to open sites like buildings or hollow logs at night.	Absent	The Study Area does not contain any caves or other rocky areas suitable for roosting. There have been no observations documented in CNDDB within five miles of the Study Area within the last 50-years.
Corynorhinus townsendii Townsend's big-eared bat	None/None SSC	Species requires adequate roosting habitat in caves, tunnels, mines and buildings and is very sensitive to disturbance. Prefers mesic habitats where it forages along the edges of forest and brushlands.	Absent	There were no caves, tunnels or mines that would be suitable for the species. The Study Area is an active facility with significant disturbance that would likely prevent the species from utilizing the area. There have been no observations documented in CNDDB within five miles of the Study Area.
Euderma maculatum spotted bat	None/None SSC	Found in the foothills, mountains and deserts of southern California in desert scrub, grasslands and mixed conifer. Primarily roosts in rock crevices on cliff faces. Forages over water and washes.	Absent	There were no crevices or cliff faces observed within the Study Area. There have been no observations documented in CNDDB within 5-miles of the Study Area within the last 50-years.

Regional Vicinity refers to within the topographic quadrant and immediately surrounding quadrants.

SSC = CDFW Species of Special Concern FP = State Fully Protected

Appendix B: Site Photographs

Honor Rancho Compressor Station



Honor Rancho Compressor Station

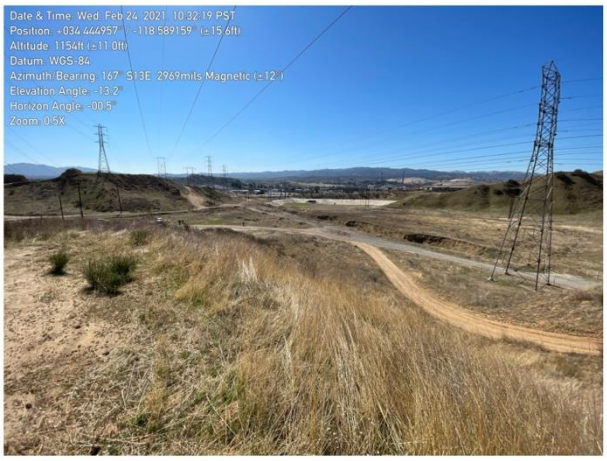
Proposed Electrical Line Easement

Proposed Electrical Line Easement

Proposed Electrical Line Easement

Proposed Electrical Line Easement

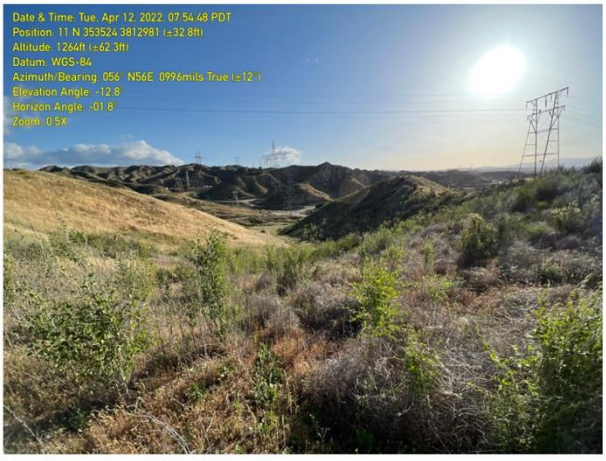
Eastern Study Area



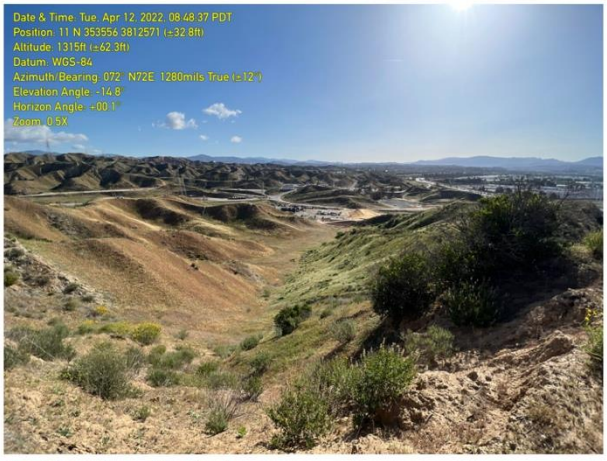
Southwestern Study Area

North Central Study Area

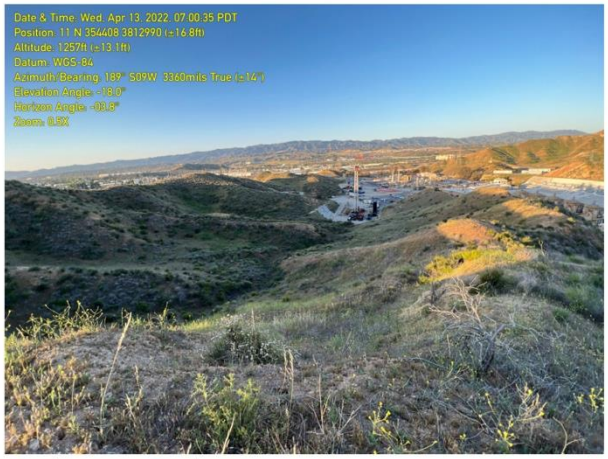
East Central Study Area



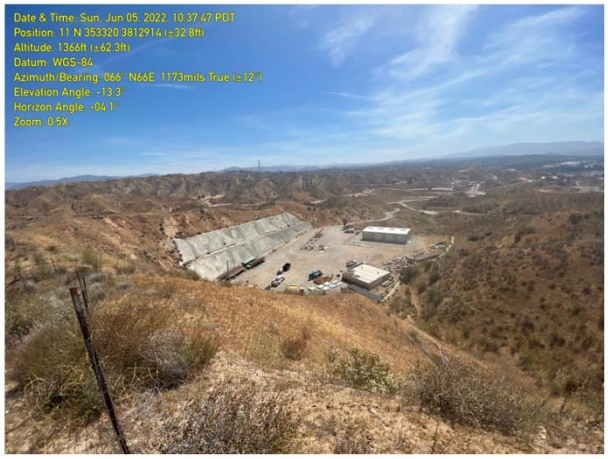
Northwestern Study Area



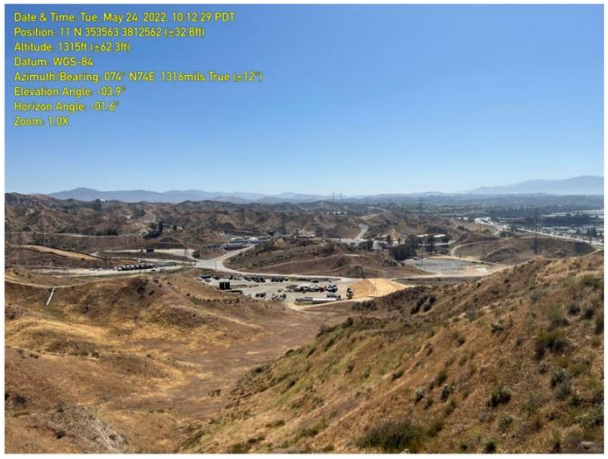
Southwestern Study Area



Northeastern Study Area



Western Study Area



Southwestern Study Area

View Towards WEZU Drilling Site

Appendix C: Plant and Wildlife Observations

Plant Species Observed Within the Study Area

Scientific Name	Common Name
FERNS	
PTERIDACEAE	**BRAKE FAMILY**
Pellaea andromedifolia	coffee fern
Pentagramma triangularis subsp. *triangularis*	California goldback fern
GYMNOSPERMS	
PINACEAE	**PINE FAMILY**
Pinus sp.	pine
ANGIOSPERMS (EUDICOTS)	
ADOXACEAE	**MUSKROOT FAMILY**
Sambucus nigra subsp. *caerulea*	blue elderberry
ANACARDIACEAE	**SUMAC OR CASHEW FAMILY**
Rhus aromatica	skunkbrush
APIACEAE	**CARROT FAMILY**
Lomatium utriculatum	common lomatium
ASTERACEAE	**SUNFLOWER FAMILY**
Acourtia microcephala	sacapellote
Artemisia californica	California sagebrush
Baccharis pilularis	coyote brush
Baccharis salicifolia subsp. *salicifolia*	mule fat
*Centaurea melitensis**	tocalote
Chaenactis glabriuscula var. *glabriuscula*	yellow pincushion
Deinandra fasciculata	fascicled tarweed
Encelia farinosa	brittlebush
Erigeron canadensis	horseweed
Gutierrezia californica	california matchweed
*Hypochaeris glabra**	smooth cat's-ear
*Lactuca serriola**	prickly lettuce
Lasthenia gracilis	common goldfields
Lepidospartum squamatum	scale-broom
Logfia filaginoides	California fluffweed
*Senecio vulgaris**	common groundsel
*Sonchus oleraceus**	common sow thistle
Uropappus lindleyi	silver puff
BORAGINACEAE	**BORAGE FAMILY**
Amsinckia intermedia	Rancher's fiddleneck
Amsinckia menziesii	common fiddleneck
Cryptantha intermedia	common forget-me-not
Emmenanthe penduliflora	whispering bells
Pectocarya linearis subsp. *ferocula*	slender pectocarya
Phacelia distans	wild heliotrope

Phacelia parryi	parry's phacelia
Pholistoma membranaceum	white fiesta flower
Plagiobothrys canescens	valley popcornflower
BRASSICACEAE	**MUSTARD FAMILY**
*Brassica nigra**	black mustard
Lepidium nitidum	shining peppergrass
*Sisymbrium altissimum**	tumble mustard
Thysanocarpus radians	ribbed fringepod
CACTACEAE	**CACTUS FAMILY**
Opuntia basilaris	beavertail cactus
CHENOPODIACEAE	**GOOSEFOOT FAMILY**
Chenopodium californicum	California goosefoot
*Salsola tragus**	Russian thistle
CONVOLVULACEAE	**MORNING-GLORY FAMILY**
Calystegia macrostegia subsp. *intermedia*	south coast morning-glory
Cuscuta californica var. *californica*	chaparral dodder
CRASSULACEAE	**STONECROP FAMILY**
Crassula connata	pygmy-weed
Dudleya sp.	dudleya
CUCURBITACEAE	**GOURD FAMILY**
Cucurbita palmata	coyote melon
Marah macrocarpa	wild cucumber
EUPHORBIACEAE	**SPURGE FAMILY**
Chamaesyce albomarginata	rattlesnake weed
Croton setiger	turkey-mullein
Stillingia linearifolia	linear-leaved stillingia
FABACEAE	**LEGUME FAMILY**
Acmispon glaber	deerweed
Acmispon strigosus	strigose lotus
Astragalus didymocarpus var. *didymocarpus*	white dwarf locoweed
Astragalus trichopodus var. *lonchus*	ocean locoweed
Lupinus bicolor	miniature lupine
Lupinus hirsutissimus	stinging lupine
Lupinus microcarpus var. *microcarpus*	red-flower lupine
Lupinus sparsiflorus	Coulter's lupine
Lupinus truncatus	collar lupine
*Medicago polymorpha**	bur clover
*Melilotus indicus**	Indian sweetclover
Trifolium ciliolatum	tree clover
FAGACEAE	**OAK FAMILY**
Quercus berberidifolia	scrub oak
Quercus lobata	valley oak
GERANIACEAE	**GERANIUM FAMILY**

*Erodium cicutarium**	red-stemmed filaree
GROSSULARIACEAE	**GOOSEBERRY FAMILY**
Ribes quercetorum	oak gooseberry
LAMIACEAE	**MINT FAMILY**
*Marrubium vulgare**	horehound
Salvia apiana	white sage
Salvia columbariae	chia
Salvia leucophylla	purple sage
Salvia mellifera	black sage
Trichostema austromontanum subsp. *austromontanum*	San Jacinto bluecurls
LOASACEAE	**LOASA FAMILY**
Mentzelia affinis	hydra stick-leaf
MALVACEAE	**MALLOW FAMILY**
Malacothamnus fasciculatus	mesa bushmallow
*Malva parviflora**	cheeseweed
MONTIACEAE	**MINER'S LETTUCE FAMILY**
Calandrinia ciliata	red maids
MYRSINACEAE	**MYRSINE FAMILY**
*Anagallis arvensis**	scarlet pimpernel
MYRTACEAE	**MYRTLE FAMILY**
Eucalyptus sp.*	gum tree
NYCTAGINACEAE	**FOUR O'CLOCK FAMILY**
Mirabilis laevis	wishbone bush
ONAGRACEAE	**EVENING PRIMROSE FAMILY**
Camissoniopsis bistorta	California sun cup
Eulobus californicus	California evening primrose
OROBANCHACEAE	**BROOM-RAPE FAMILY**
Castilleja exserta subsp. *exserta*	purple owl's-clover
PAPAVERACEAE	**POPPY FAMILY**
Eschscholzia caespitosa	tufted poppy
Eschscholzia californica	California poppy
PLANTAGINACEAE	**PLANTAIN FAMILY**
Plantago ovata	woolly plantain
POLEMONIACEAE	**PHLOX FAMILY**
Gilia angelensis	angel gilia
POLYGONACEAE	**BUCKWHEAT FAMILY**
Chorizanthe staticoides	Turkish rugging
Eriogonum fasciculatum	California buckwheat
RHAMNACEAE	**BUCKTHORN FAMILY**
Ceanothus cuneatus	buck brush
ROSACEAE	**ROSE FAMILY**
Adenostoma fasciculatum	chamise
Heteromeles arbutifolia	toyon

Adenostoma sparsifolium	red shank
SOLANACEAE	**NIGHTSHADE FAMILY**
*Nicotiana glauca**	tree tobacco
Solanum xanti	chaparral nightshade
TAMARICACEAE	**TAMARISK FAMILY**
*Tamarix ramosissima**	Mediterranean tamarisk
ANGIOSPERMS (MONOCOTS)	
AGAVACEAE	**AGAVE FAMILY**
Hesperoyucca whipplei	Our Lord's candle
LILIACEAE	**LILY FAMILY**
Calochortus clavatus subsp. Pallidus	clubhair mariposa lily, pale yellow mariposa
POACEAE	**GRASS FAMILY**
*Avena barbata**	slender wild oat
*Bromus diandrus**	ripgut grass
*Bromus hordeaceus**	soft chess
Bromus madritensis subsp. *rubens**	red brome
*Bromus tectorum**	cheat grass
Elymus condensatus	giant wild rye
Festuca microstachys	small fescue
*Festuca myuros**	rat-tail fescue
*Hordeum murinum**	glaucous foxtail barley
Melica imperfecta	coast range melic
*Schismus barbatus**	Mediterranean schismus
Stipa pulchra	purple needlegrass
THEMIDACEAE	**BRODIAEA FAMILY**
Bloomeria crocea	common goldenstar
Dichelostemma capitatum subsp. *capitatum*	blue dicks
Dichelostemma capitatum subsp. *pauciflorum*	few-flower blue dicks
Muilla maritima	common muilla

*Non-Native Species, +Ornamental, Unlikely to be Invasive

Wildlife Species Observed Within the Study Area

Scientific Name	Common Name	Status	Native or Introduced
Birds			
Haemorhous mexicanus	house finch	None	Native
Zonotrichia leucophrys	white-crowned sparrow	None	Native
Corvus corax	common raven	None	Native
Zenaida macroura	mourning dove	None	Native
Accipiter cooperii	Cooper’s Hawk	CDFW - WL	Native
Spinus psaltria	lesser goldfinch	None	Native
Setophaga coronata	yellow-rumped warbler	None	Native
Calypte anna	Anna’s hummingbird	None	Native
Icterus bullockii	Bullock's Oriole	None	Native
Icterus cucullatus	Hooded Oriole	None	Native
Falco sparverius	American Kestrel	None	Native
Pheucticus melanocephalus	Black-headed Grosbeak	None	Native
Piranga ludoviciana	Western Tanager	None	Native
Baeolophus inornatus	Oak Titmouse	None	Native
Corvus brachyrhynchos	American Crow	None	Native
Aphelocoma californica	California Scrub-Jay	None	Native
Spinus tristis	American Goldfinch	None	Native
Haemorhous mexicanus	House Finch	None	Native
Spinus lawerencei	Lawrence’s Goldfinch	None	Native
Spinus psaltria	Lesser Goldfinch	None	Native
Buteo swainsoni	Swainson's Hawk	CESA - Endangered	Native
Selasphorus sasin	Allen's Hummingbird	None	Native
Charadrius vociferus	Killdeer	None	Native
Mimus polyglottos	Northern Mockingbird	None	Native
Chondestes grammacus	Lark Sparrow	None	Native
Pipilo maculatus	Spotted Towhee	None	Native
Aimophila ruficeps canescens	Southern California Rufous-crowned Sparrow	CDFW - WL	Native

Scientific Name	Common Name	Status	Native or Introduced
Passer domesticus	House Sparrow	None	Introduced
Streptopelia decaocto	Eurasian Collared-Dove	None	Introduced
Columba livia	Rock Pigeon	None	Introduced
Phainopepla nitens	Phainopepla	None	Native
Sturnus vulgaris	European Starling	None	Introduced
Hirundo rustica	Barn Swallow	None	Native
Petrochelidon pyrrhonota	Cliff Swallow	None	Native
Stelgidopteryx serripennis	Northern Rough-winged Swallow	None	Native
Chaetura vauxi	Vaux's Swift	CDFW SSC	Native
Aeronautes saxatalis	White-throated Swift	None	Native
Chamaea fasciata	Wrentit	None	Native
Myiarchus cinerascens	Ash-throated Flycatcher	None	Native
Sayornis nigricans	Black Phoebe	None	Native
Sayornis saya	Say's Phoebe	None	Native
Tyrannus verticalis	Western Kingbird	None	Native
Vireo bellii pusillus	Least Bell's Vireo	ESA – Endangered CESA – Endangered	Native
Melanerpes formicivorus	Acorn Woodpecker	None	Native
Dryobates nuttallii	Nuttall's Woodpecker	None	Native
Setophaga townsendi	Townsend's Warbler	None	Native
Cardellina pusilla	Wilson's Warbler	None	Native
Thryomanes bewickii	Bewick's Wren	None	Native
Troglodytes aedon	House Wren	None	Native
Tyrannus vociferans	Cassin’s kingbird	None	Native
Calypte costae	Costa’s hummingbird	None	Native
Callipepla californica	California quail	None	Native
Melozone crissalis	California towhee	None	Native
Psaltriparus minimus	bushtit	None	Native
Buteo jamaicensis	red-tailed hawk	None	Native

Scientific Name	Common Name	Status	Native or Introduced
Cathartes aura	turkey vulture	None	Native
Reptiles			
Uta stansburiana elegans	western side-blotched lizard	None	Native
Sceloporus occidentalis longipes	Great Basin Fence Lizard	None	Native
Coluber flagellum piceus	Red Racer	None	Native
Crotalus oreganus helleri	Southern Pacific Rattlesnake	None	Native
Mammals			
Sylvilagus audubonii	desert cottontail rabbit	None	Native
Otospermophilus beecheyi	California ground squirrel	None	Native
Canis latrans	coyote	None	Native
Odocoileus hemionus	mule deer	None	Native
Thomomys bottae	Botta's pocket gopher	None	Native

ESA – Endangered Species Act
CESA – California Endangered Species Act
CDFW – California Department of Fish and Wildlife
WL – Watch List
SSC – Species of Special Concern

Appendix D: San Fernando Spineflower Survey Results

2022 SURVEY RESULTS

for

San Fernando Valley Spineflower

(*Chorizanthe parryi* var. *fernandina*)

SoCalGas Honor Rancho Storage Facility

Los Angeles County, California

Prepared for:

The SoCalGas Honor Rancho Modernization Project

Prepared by:

J Campbell Biological Services

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Monrovia, CA 91016

Contact: Jennifer Campbell

626.344.3918

June 2022

Table of Contents

Figures

Tables

APPENDICES

1 Introduction

The purpose of this report is to document the results of a focused botanical survey to determine the presence/absence of San Fernando Valley Spineflower (*Chorizanthe parryi* var. *fernandina*; SFVS) within the approximately 240-acre SoCalGas Honor Rancho Modernization Project (Project) Study Area (Figure 1, *Regional Map*; Figure 2, *Project Location Map*). Surveys were undertaken at the SoCalGas Honor Rancho Storage Facility over five days between March 15 and May 26, 2022.

SFVS is a State Endangered plant and CNPS-designated CRPR 1B.1. Species listed or candidates for listing as rare, threatened, or endangered are protected under the California Endangered Species Act (CESA) or Native Plant Protection Act (NPPA). As part of their due diligence for the Project, SoCalGas researched sensitive plants with the potential to occur within the Project Study Area to avoid any effects from the Project on these limited resources.

Focused surveys were undertaken for SFVS because records of occurrences are from 1.5 miles to the west of the Project Study Area and have similar rolling hill topography and soils (Castaic-Balcom silty clay loams, 30 to 50 percent slopes, eroded, soil map unit) to that found in the Project Study Area (Figure 3, *Local SFVS Occurrences*). Considering the correct habitat components are present within the Project Study Area, as well as the numerous documented observations adjacent to and west of Interstate 5 this species was identified for a focused survey effort by the Biological Resources Assessment for the Project (Caskey Biological 2021).

2 Project Description

2.1 Project Location

The Project site is within the SoCalGas Honor Rancho Storage Facility located south of the community of Castaic, in Los Angeles County, California, east of the Newhall Ranch Road and Interstate-5 intersection at 28300 Brady Parkway. Regionally, the Project site is in the northern portion of the Los Angeles County (Figure 1). The approximate center of the Project site is at latitude 34.44511°N and longitude -118.58771°W (WGS84) (Figure 2). The Project site is within the Newhall, California United States Geological Survey (USGS) 7.5-minute topographic quadrangle. The Project site is at elevations ranging approximately between 1,075 and 1,260 feet (ft.) above mean sea level (msl).

2.2 Project Components

2.2.1 Compressor Upgrade

The Project will replace five existing reciprocating compressor gas lean-burn engines (each 5,500 hp) with six new reciprocating compressors. These six compressors are comprised of four gas engines, each 5,000 hp with Selective Catalytic Reduction (SCR) and oxidation catalyst system on each natural gas lean-burn engine and two electric engines, each 5,000 hp. The Project will require aqueous ammonia or urea storage tanks with secondary containment to support the SCR systems. The Project will require demolition of the existing compressor building. A new compressor building will be constructed in the eastern portion of the Project Study Area. Construction of the new compressor building will require 50,930 cubic yards of cut and 14,400 cubic yards of fill, resulting in exporting 36,530 cubic yards.

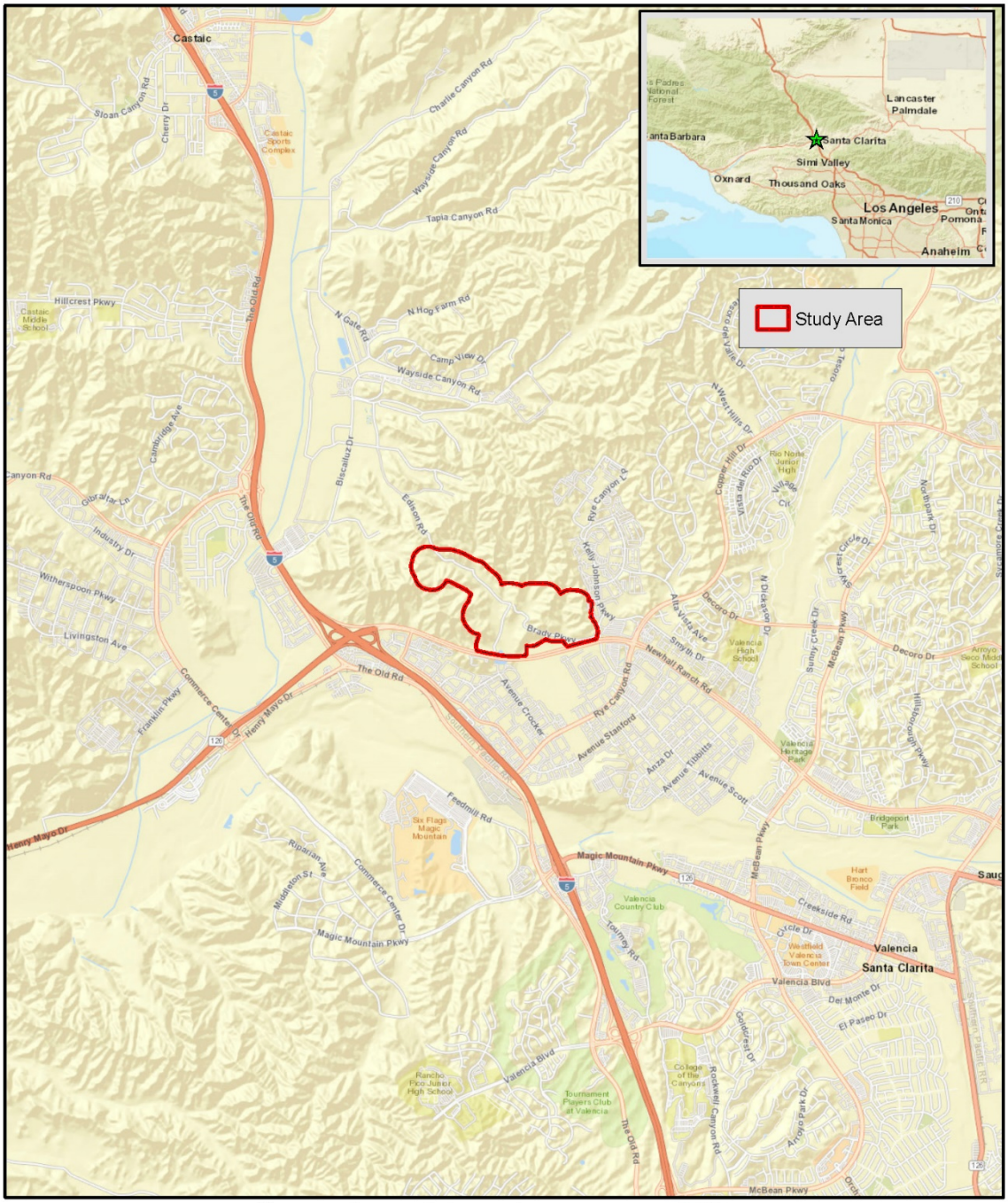

FIGURE 1
Regional Map

DATE: May 23, 2022
COORDINATE SYSTEM: NAD 1983 State Plane California Zone V FIPS 0406 (feet)
SOURCE: ESRI World Street Map

PROJECT:
Honor Rancho
Compressor Modernization
Rare Plant Survey

Figure 1: Regional Map

Figure 2: Project Location Map

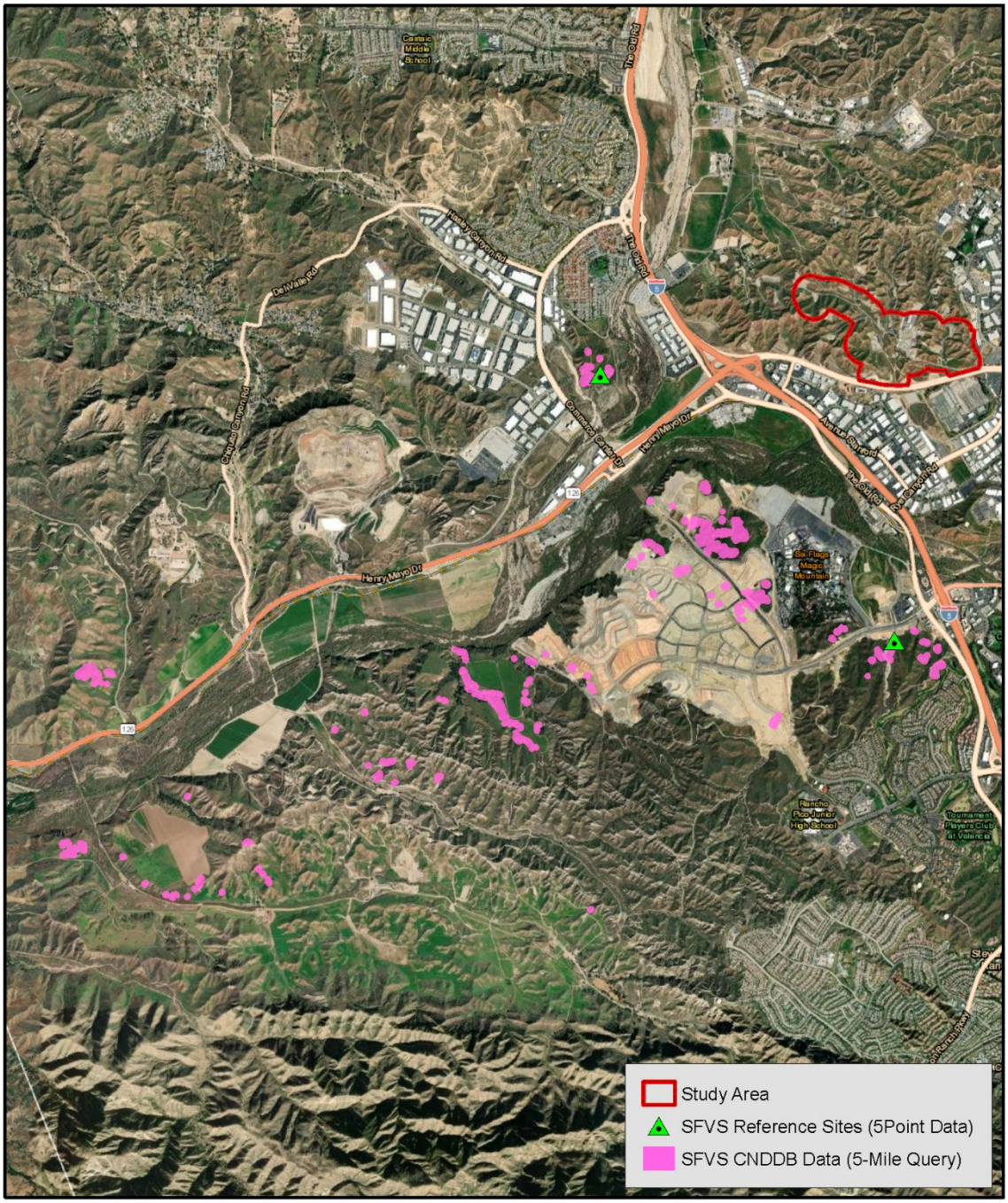

Figure 3: SFVS Local Occurrences

2.2.2 Well Abandonment / Redrilling

The new compressor station will require the plugging and abandonment of two natural gas injection wells. One of these wells is currently active while the other is inactive. Two new wells will be drilled to replace these existing wells.

2.2.3 Natural Gas Fuel Cell / Electrical Storage System (Primary Microgrid)

The Project would also construct a natural gas fuel cell and electrical storage system to provide power to the administration and auxiliary station loads.

2.2.4 Substation

A substation will likely be required for the electric-driven compressors. SoCalGas anticipates submitting a Distribution Level Request (differing from a more formal Method of Service) to Southern California Edison to confirm 33kV is appropriate to support the 7.5 MW electric load of the new electric-driven compressors in addition to the 2 MW electric load to support the Advanced Renewable Energy "ARE" project components.

2.2.5 Advanced Renewable Energy Project Components

SoCalGas is also considering constructing ARE components as part of the Project. Project elements associated with the ARE components for onsite hydrogen production and include an electrolyzer, compressor, hydrogen storage, and fleet fueling station.

2.2.6 Provisional Microgrid

In addition to the microgrid discussed above, SoCalGas is considering a second microgrid comprised of a hydrogen PEM fuel cell and solar pv arrays to support administration and auxiliary station loads.

3 Species Description/Natural History

SFVS is a dicot in the buckwheat family (Polygonaceae), an annual herb native to California, and is endemic (limited) to California, alone, where it has a State protected status of Endangered and California Rare Plant Rank: 1B.1 (Calflora 2022). Hickman et al. (1993) describes this plant as low-growing with horizontally spreading stems and clusters of spiny flowers. Leaves have smooth, entire margins and grow at the base of the plant into a basal rosette, where they typically can reach 1.5 inches in length. Involucres are composed of six fused lobes, each bearing a terminal awn alternating longer and shorter in length. Awns are typically straight, a feature that distinguishes the taxanomic classification of this spineflower. Flowers are white.

This species was thought to be extinct (Hickman et al. 1993) until 1999 when it was rediscovered on Laskey Mesa as part of biological surveys associated with the proposed Ahmanson Ranch development in southeastern Ventura County (Glenn Lukos Associates, Inc. and Sapphos Environmental, Inc. 2000).

3.1 Phenology

SFVS exhibits an annual life strategy where a vegetative stage germinates, flowers, and seeds during a portion of a year; and then disarticulates, yielding to a soil-borne seed bank stage for the remainder of the year. Basal rosettes of leaves first appear in late February to well into March, although timing can fluctuate based on weather patterns. This California endemic species has a published blooming period between April and June (The Jepson Herbarium-online 2022).

3.2 Distribution

Populations of SFVS are made up of discreet groupings of plants referred to as subpopulations, e.g. the Laskey Mesa subpopulation at Ahmanson Ranch. Plants occur within an elevation range from 90-500 meters (The Jepson Herbarium-online 2022). The number of individuals and spatial distribution in a given subpopulation of spineflower can fluctuate from year to year (Dudek 2021), as do germination and bloom events. However, in general, subpopulations appear to remain at the same locations year after year.

Factors that limit spineflower to patches of open habitat among seemingly suitable habitat are not well understood. Empirical investigations point toward a lack of tolerance for neighboring plants as observed among related taxa (Coppoletta and Moritsch 2001; Kluse and Doak 1999). Mechanisms such as shade intolerance (McGraw and Levin 1998) and competition from neighboring plants (Sapphos Environmental, Inc. 2003) are suggested from empirical investigations of sister taxa, *Chorizanthe pungens var. hartwegiana* (Ben Lomond spineflower) and SFVS, respectively. Poor dispersal has been suggested as a limiting factor with a decumbent growth form (Ferguson et al. 1996). Anecdotal evidence for dispersal mechanisms has been offered by authors, such as mammalian fur and stashing by ants. However, because plants appear in a similar location year after year, dispersal does not appear to be a strategy for long-term persistence.

Existing populations, west of I-5 and largely southwest of the I-5/SR 126 junction (Figure 3), are monitored by The Newhall Land and Farming Company (Dudek 2021). A 2011 CNDDB record of SFVS from 1.5 miles west of the Project Study Area has similar rolling hill topography and soils (Castaic-Balcom silty clay loams, 30 to 50 percent slopes, eroded, soil map unit) as those found within the Project Study Area (Caskey Biological 2021).

3.3 Associated Plant Communities/Habitat Characteristics

SFVS is most often found in coastal scrub and valley and foothill grasslands within sandy soils (Caskey Biological 2021). Plants are associated with open ground provided by rocky out crops where soils are thin and neighboring vegetative cover is reduced (Appendix B, photo 3). In addition, plants occur among open ground in grasslands.

SFVS does not persist among dense expressions of plant communities, whether scrubland or grassland, where open ground is absent, an overstory shades the ground, or a shrubland creates allelopathic conditions.

3.4 Detectability

SFVS is distinct in appearance at various stages of growth and in its distribution.

Basal rosettes are a bright green with clean margins along the leaves, occasionally exhibiting one or a couple of red leaves. When branches and involucres develop, few neighboring plants exhibit the branching spiny involucres. When flowering, the white geometrically organized flowers lend additional distinction. And then finally, all distinct morphological traits turn a rusty-red color before disarticulating at the end of the growth season.

Distribution of SFVS is also distinct in that plants occur in clusters of hundreds or thousands of individuals rather than interspersed across a plant community. As such plants provide a relatively large visual queue.

4 Methods

Arial Photography of the Project Study Area was examined prior to surveys where key features such as roads, well pads and rock outcrops served as landmarks to Project Study Area boundaries.

All surveys were conducted on foot, using meandering transects where surveyors had 100% visual assessment of the ground within suitable habitat as described in Section 3.3. Unsuitable habitat such as dense grasses with no bare ground, ruderal disturbed, and chaparral (burned), also described in Section 3.3, were not surveyed. Surveys were conducted in Spring of 2022 in accordance with the schedule provided in Table 1, *Monitoring Schedule and Personnel*.

A reference site at Ahmanson Ranch was visited on March 8, 2022. SFVS was observed in two life stages: basal rosettes and basal rosettes with flower structures where perianths were not visible (Appendix B, *Site Photos*, Photo 1a). FivePoint, who manages the Newhall SFVS population, provided reference sites where SFVS was observed in full bloom (Appendix B, Photo 1b) on April 29, 2022 at approximate locations: 34°26'32.42"N, 118°37'10.81"W and 34°25'8.87"N, 118°35'17.76"W (Figure 3).

Two surveyors spent four, seven-hour days conducting the presence/absence surveys, beginning in mid-March and concluding mid-April. One surveyor spent better than three hours conducting presence/absence surveys along Edison Road on May 26. Surveyors searched for basal rosettes and basal rosettes with flower stalks during the mid-March surveys. Surveyors searched for white, decumbent inflorescences of flowers during the March 29 and April 11 surveys. And finally, surveyors searched for rust-colored plants with white, decumbent inflorescences of flowers during the May 26 survey. Additionally, surveyors anticipated plants occurring in a sub-population (Appendix B, Photo 2), a vegetative expression of the soil-seed bank rather than isolated occurrences, as is the life strategy of SFVS described in Section 3.2 within suitable habitat like at the Ahmanson Ranch reference site (Appendix B, Photo 3). This was how a sister taxon, Turkish Rugging (*Chorizanthe staticoides*), occurred on site as observed during March 15, 17, 29 and April 11 surveys--in three discreet sub-populations of upwards of one hundred individuals, each.

Biologists were familiar with identification of SFVS at various growth stages and were able to distinguish it from similar plants. Surveyor's qualifications are as follows:

Jennifer Campbell serves as an expert in SFVS since managing the population and empirical investigations at Ahmanson Ranch from 2000-2004, and summarizing the botanical and ecological information that served as the listing package for the CDFW Commission's review for listing. In addition, the sister taxon *Dodecahema leptoceras* (slender-horned spineflower) was the subject of Jennifer's graduate work and input on numerous management plans.

Rebecca Alvidrez is an advanced-level botanist with extensive botanical survey experience identifying *Chorizanthe* species and sister taxa in Los Angeles County. Rebecca assisted with the management and empirical investigations of *C. valida* (Sonoma spineflower) at Point Reyes. Rebecca currently serves on the SoCalGas Environmental staff.

Kyle Weichert is an advanced-level botanist with extensive botanical survey experience, including the identification of *Chorizanthe* species in the central coastal region of California. Kyle currently serves on the SoCalGas Environmental staff.

Table 1: Monitoring Schedule and Personnel

Date	Time	Personnel	Survey Conditions	Area
03/15/22	11:00 a.m.-4:30 p.m.	J.Campbell, R.Alvidrez	62-79 degrees F, cloudy to clearing, light wind	W9, WC1
03/17/22	9:30 a.m.-5:00 p.m.	J.Campbell, R.Alvidrez	65-73 degrees F, cloudy, light wind	BD3, BD4, C4R to Brady Parkway and to North boundary
03/29/22	9:30 a.m.-4:30 p.m.	J.Campbell, K. Weichert	52-63 degrees F, cloudy, light wind	WC3-A, WC3-B, WC3, area west of WC7 to West Boundary
04/11/22	9:30 a.m.-5:15 p.m.	J.Campbell, R.Alvidrez	55-68 degrees F, clear skies, windy 18-23 mph w intense gusts at hill tops	WEZU 28; Front country between Newhall Ranch Road and first ridge on the West Side, and Brady Parkway on the East Side
5/26/22	10:30 a.m.-1:00 p.m.	J. Campbell	75-82 degrees F, clear skies, light wind	500 ft. buffer along Edison Road, leading to WEZU 28

Notes: mph = miles per hour

5 Results

5.1 Observations

No observation of SFVS was made during surveys. A variety of annual plants was observed during surveys and is reported in Appendix A, *2022 Plant Compendium*.

Coastal scrub and grassland plant communities reported to be associated with SFVS were observed within the Project Study Area (Appendix B, photos 4 and 5), and are described in the BRA as ruderal/coastal sage scrub and ruderal/grassland (Caskey Biological 2021). Other characteristics suitable for SFVS observed on site were rock outcrops present at coastal sage scrub/grassland interfaces supporting shallow soils and bare ground with few neighboring plants.

Unsuitable habitats observed on site during SFVS surveys were chaparral (burned; Appendix B, photo 6) and dense grasslands. Although the stands of burned chaparral provided open ground, at this time, this habitat typically has a closed canopy and is therefore unsuitable for SFVS. Dense grasslands lack open ground, also unsuitable for SFVS.

The biggest limitation to SFVS occurrences within the Project Study Area is development, also described in the BRA (Caskey Biological 2021). The Project Study Area is within an active natural gas utility facility with structures, road cuts, and graded well pads.

Southern California Edison is responsible for construction within the past 10 years of numerous high-voltage towers, and tubular steel and wood poles with associated pads and access roads (Appendix B, photo 7). In addition, local commercial development including Newhall Ranch Road, as well as flood control basins, have impacted adjacent habitat located along the Southern boundary of the Project Study Area. Habitat restoration associated with these activities are comprised of common shrub and annual species.

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APPENDIX A_2022 PLANT COMPENDIUM

Honor Rancho Modernization Project
SFVS Focused Presence/Absence Survey (March-May 2022)
Plant Observations

Scientific Name	Common Name
FERNS	
PTERIDACEAE	**BRAKE FAMILY**
Pellaea andromedifolia	coffee fern
Pentagramma triangularis subsp. *triangularis*	California goldback fern
GYMNOSPERMS	
PINACEAE	**PINE FAMILY**
Pinus sp.	pine
ANGIOSPERMS (EUDICOTS)	
ADOXACEAE	**MUSKROOT FAMILY**
Sambucus nigra subsp. *caerulea*	blue elderberry
ANACARDIACEAE	**SUMAC OR CASHEW FAMILY**
Rhus aromatica	skunkbrush
APIACEAE	**CARROT FAMILY**
Lomatium utriculatum	common lomatium
ASTERACEAE	**SUNFLOWER FAMILY**
Acourtia microcephala	sacapellote
Artemisia californica	California sagebrush
Baccharis pilularis	coyote brush
Baccharis salicifolia subsp. *salicifolia*	mule fat
*Centaurea melitensis**	tocalote
Chaenactis glabriuscula var. *glabriuscula*	yellow pincushion
Deinandra fasciculata	fascicled tarweed
Encelia farinosa	brittlebush
Erigeron canadensis	horseweed
Gutierrezia californica	california matchweed
*Hypochaeris glabra**	smooth cat's-ear
*Lactuca serriola**	prickly lettuce
Lasthenia gracilis	common goldfields
Lepidospartum squamatum	scale-broom
Logfia filaginoides	California fluffweed
*Senecio vulgaris**	common groundsel
*Sonchus oleraceus**	common sow thistle
Uropappus lindleyi	silver puff
BORAGINACEAE	**BORAGE FAMILY**
Amsinckia intermedia	Rancher's fiddleneck
Amsinckia menziesii	common fiddleneck
Cryptantha intermedia	common forget-me-not

Emmenanthe penduliflora	whispering bells
Pectocarya linearis subsp. *ferocula*	slender pectocarya
Phacelia distans	wild heliotrope
Phacelia parryi	parry's phacelia
Pholistoma membranaceum	white fiesta flower
Plagiobothrys canescens	valley popcornflower
BRASSICACEAE	**MUSTARD FAMILY**
*Brassica nigra**	black mustard
Lepidium nitidum	shining peppergrass
*Sisymbrium altissimum**	tumble mustard
Thysanocarpus radians	ribbed fringepod
CACTACEAE	**CACTUS FAMILY**
Opuntia basilaris	beavertail cactus
CHENOPODIACEAE	**GOOSEFOOT FAMILY**
Chenopodium californicum	California goosefoot
*Salsola tragus**	Russian thistle
CONVOLVULACEAE	**MORNING-GLORY FAMILY**
Calystegia macrostegia subsp. *intermedia*	south coast morning-glory
Cuscuta californica var. *californica*	chaparral dodder
CRASSULACEAE	**STONECROP FAMILY**
Crassula connata	pygmy-weed
Dudleya sp.	dudleya
CUCURBITACEAE	**GOURD FAMILY**
Cucurbita palmata	coyote melon
Marah macrocarpa	wild cucumber
EUPHORBIACEAE	**SPURGE FAMILY**
Chamaesyce albomarginata	rattlesnake weed
Croton setiger	turkey-mullein
Stillingia linearifolia	linear-leaved stillingia
FABACEAE	**LEGUME FAMILY**
Acmispon glaber	deerweed
Acmispon strigosus	strigose lotus
Astragalus didymocarpus var. *didymocarpus*	white dwarf locoweed
Astragalus trichopodus var. *lonchus*	ocean locoweed
Lupinus bicolor	miniature lupine
Lupinus hirsutissimus	stinging lupine
Lupinus microcarpus var. *microcarpus*	red-flower lupine
Lupinus sparsiflorus	Coulter's lupine
Lupinus truncatus	collar lupine
*Medicago polymorpha**	bur clover
*Melilotus indicus**	Indian sweetclover
Trifolium ciliolatum	tree clover
FAGACEAE	**OAK FAMILY**

Quercus berberidifolia	scrub oak
Quercus lobata	valley oak
GERANIACEAE	**GERANIUM FAMILY**
*Erodium cicutarium**	red-stemmed filaree
GROSSULARIACEAE	**GOOSEBERRY FAMILY**
Ribes quercetorum	oak gooseberry
LAMIACEAE	**MINT FAMILY**
*Marrubium vulgare**	horehound
Salvia apiana	white sage
Salvia columbariae	chia
Salvia leucophylla	purple sage
Salvia mellifera	black sage
Trichostema austromontanum subsp. *austromontanum*	San Jacinto bluecurls
LOASACEAE	**LOASA FAMILY**
Mentzelia affinis	hydra stick-leaf
MALVACEAE	**MALLOW FAMILY**
Malacothamnus fasciculatus	mesa bushmallow
*Malva parviflora**	cheeseweed
MONTIACEAE	**MINER'S LETTUCE FAMILY**
Calandrinia ciliata	red maids
MYRSINACEAE	**MYRSINE FAMILY**
*Anagallis arvensis**	scarlet pimpernel
MYRTACEAE	**MYRTLE FAMILY**
Eucalyptus sp.*	gum tree
NYCTAGINACEAE	**FOUR O'CLOCK FAMILY**
Mirabilis laevis	wishbone bush
ONAGRACEAE	**EVENING PRIMROSE FAMILY**
Camissoniopsis bistorta	California sun cup
Eulobus californicus	California evening primrose
OROBANCHACEAE	**BROOM-RAPE FAMILY**
Castilleja exserta subsp. *exserta*	purple owl's-clover
PAPAVERACEAE	**POPPY FAMILY**
Eschscholzia caespitosa	tufted poppy
Eschscholzia californica	California poppy
PLANTAGINACEAE	**PLANTAIN FAMILY**
Plantago ovata	woolly plantain
POLEMONIACEAE	**PHLOX FAMILY**
Gilia angelensis	angel gilia
POLYGONACEAE	**BUCKWHEAT FAMILY**
Chorizanthe staticoides	Turkish rugging
Eriogonum fasciculatum	California buckwheat
RHAMNACEAE	**BUCKTHORN FAMILY**
Ceanothus cuneatus	buck brush

ROSACEAE	**ROSE FAMILY**
Adenostoma fasciculatum	chamise
Heteromeles arbutifolia	toyon
SOLANACEAE	**NIGHTSHADE FAMILY**
*Nicotiana glauca**	tree tobacco
Solanum xanti	chaparral nightshade
TAMARICACEAE	**TAMARISK FAMILY**
*Tamarix ramosissima**	Mediterranean tamarisk
ANGIOSPERMS (MONOCOTS)	
AGAVACEAE	**AGAVE FAMILY**
Hesperoyucca whipplei	Our Lord's candle
LILIACEAE	**LILY FAMILY**
Calochortus clavatus subsp. Pallidus	clubhair mariposa lily, pale yellow mariposa
POACEAE	**GRASS FAMILY**
*Avena barbata**	slender wild oat
*Bromus diandrus**	ripgut grass
*Bromus hordeaceus**	soft chess
Bromus madritensis subsp. *rubens**	red brome
*Bromus tectorum**	cheat grass
Elymus condensatus	giant wild rye
Festuca microstachys	small fescue
*Festuca myuros**	rat-tail fescue
*Hordeum murinum**	glaucous foxtail barley
Melica imperfecta	coast range melic
*Schismus barbatus**	Mediterranean schismus
Stipa pulchra	purple needlegrass
THEMIDACEAE	**BRODIAEA FAMILY**
Bloomeria crocea	common goldenstar
Dichelostemma capitatum subsp. *capitatum*	blue dicks
Dichelostemma capitatum subsp. *pauciflorum*	few-flower blue dicks
Muilla maritima	common muilla

*Non-Native Species, +Ornamental, Unlikely to be Invasive

APPENDIX B_SITE PHOTOS

Photos 1a & 1b: Reference SFVS plants close-up view: Laskey Mesa at Ahmanson Ranch (above-March 8, 2022) and at Newhall, approximate location 34°25'8.87"N, 118°35'17.76"W (below-April 29, 2022).

Photo 2: Multiple SFVS plants on Laskey Mesa at Ahmanson Ranch (circled-March 8, 2022).

Photo 3: SFVS Habitat on Laskey Mesa at Ahmanson Ranch: coastal sage scrub/grassland interface on rock outcrop (March 8, 2022).

Photo 4: Potentially suitable habitat for SFVS within the Project Study Area: coastal sage scrub/grassland interface on rock outcrop in background view (April 29, 2022).

Photo 5: Potentially suitable habitat for SFVS within the Project Study Area: grassland with open ground (April 15, 2022).

Photo 6: Unsuitable habitat for SFVS within the Project Study Area: Chaparral habitat (burned; May 26, 2022).

Photo 7: Large-scale electric facilities projects within the Project Study Area (May 26, 2022).

Appendix E: Coastal California Gnatcatcher Survey Results

COASTAL CALIFORNIA GNATCATCHER PRESENCE/ABSENCE PROTOCOL SURVEY REPORT
Honor Rancho Compressor Modernization
Los Angeles County, California

Prepared for:

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Ventura Fish and Wildlife Office (VFWO)
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August 11, 2023

Table of Contents

List of Tables

List of Figures

List of Appendices

1.0 EXECUTIVE SUMMARY

A Coastal California Gnatcatcher (*Polioptila californica californica*) (CAGN) protocol presence/absence breeding survey (protocol survey) was conducted in habitat that was determined to be suitable by Searl Biological Services' (SBS) permitted CAGN biologist Tim Searl (ES02351A) during the 2023 breeding season within 500-feet of the proposed Honor Rancho Compressor Modernization Project (Study Area). The Study area was divided into three Survey Areas due to the size and topography. Each survey area was surveyed six times with a total of 18 sequential daily visits and were performed between April 15 and June 6, 2022, per the U. S. Fish and Wildlife Service (USFWS) February 28, 1997 *Coastal California Gnatcatcher (Polioptila californica californica) Presence/Absence Survey Guidelines* (U. S. Fish & Wildlife Service, 1997) (CAGN Survey Protocol). The overall habitat suitability within the Study Area was low, and CAGN was not detected within or near the Study Area.

A protocol survey was conducted in 2021 and 2022 for much of the 2023 Study Area and those surveys were also negative for CAGN.

2.0 INTRODUCTION

The purpose of this protocol survey was to determine if CAGN was present or absent within the Study Area for Southern California Gas Company's (SoCalGas) proposed Honor Rancho Compressor Modernization Project (Project). The protocol survey was performed, and this report prepared, according to the requirements of the CAGN Survey Protocol and section 10(a)(1)(A) take authorization permit for Mr. Searl.

2.1 Project Location

The Study Area was located south of the community of Castaic, in the northern portion of Los Angeles County, California, approximately one aerial mile east of the Newhall Ranch Road and Interstate 5 (I-5) intersection. Portions of the Study Area were within the City of Santa Clarita. *Figure 1 - Regional Map* (Page 2) depicts the general location of the Study Area.

The Study Area was geographically located in the Newhall 7.5 Minute United States Geological Survey (USGS) California Quadrangle. *Figure 2 - USGS Topographic Map* (Page 3) depicts the Study Area's geographic location. Elevations on the Study Area ranged from approximately 1,060-feet to 1,380-feet above mean sea level (msl). The Universal Transverse Mercator (UTM) coordinates of the approximate center of the Study Area was Zone 11N; 354,109-meters East; 3,812,869-meters North; North American Datum 1983 (NAD83).

2.2 Project Description

The modernized facility would include the following replacement equipment subject to South Coast Air Quality Management District (AQMD) permitting:

- Four compressor gas lean-burn engines, each rated at approximately 5,000 horsepower (HP), with post-combustion emission control systems;
- One aboveground 8,000-gallon aqueous urea storage tank.

Ancillary equipment would also be installed, including the following equipment not subject to permitting by the South Coast AQMD:

- Two electric motor-driven compressors (EDCs), each approximately 5,500 HP;
- Hydrogen generation, storage, blending, and dispensing equipment;

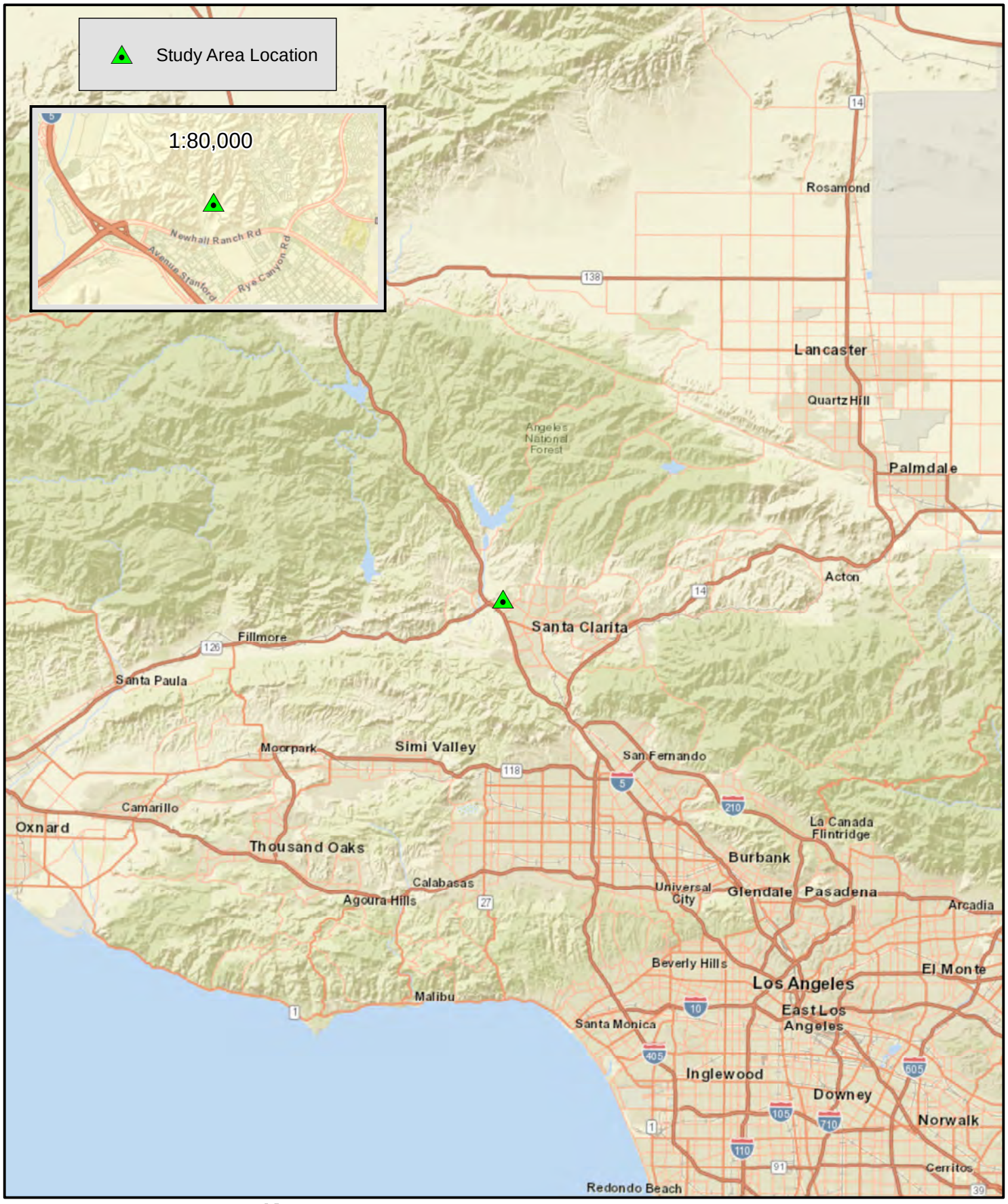
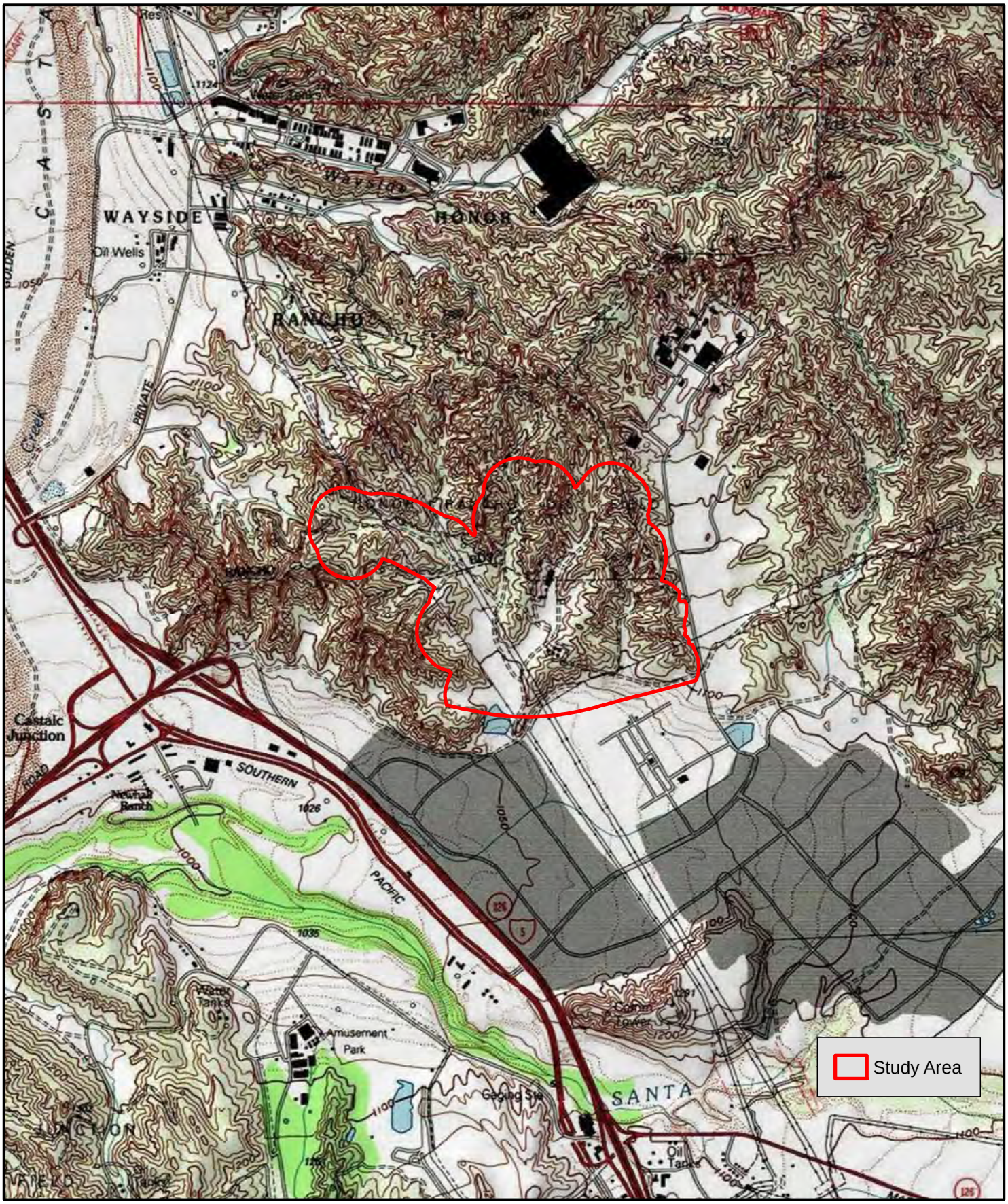


FIGURE 1
Regional Location

DATE: August 10, 2023
COORDINATE SYSTEM: NAD 1983 UTM Zone 11
SOURCE: ESRI World Street Map

PROJECT:
Honor Rancho
Compressor Modernization
2023 CAGN Protocol Survey



N

0 0.25 0.5 1 Miles

1:24,000

FIGURE 2
USGS Topographic Map

DATE: August 8, 2023
COORDINATE SYSTEM: NAD 1983 State Plane California Zone V FIPS 0406 (feet)
SOURCE: ESRI USA Topo Maps, SoCalGas

PROJECT:
Honor Rancho
Compressor Modernization
2023 CAGN Protocol Survey

- Green hydrogen fueling station for company vehicles;
- Microgrid comprising electric generation sources, as well as an energy storage system (ESS) and a solid oxide fuel cell (SOFC) system to generate electricity to support auxiliary and administrative electrical loads while reducing the need for onsite combustion engine electricity generation;
- Compression support equipment, including cooling towers, lube oil system, tanks, filter/separators and control, electrical, and instrumentation equipment;
- Southern California Edison Substation and Electrical Interconnection.

2.3 Study Area Description

The Study Area consisted of the proposed area encompassing the Honor Rancho Compressor Modernization Project and a 500-foot buffer, which included the SoCalGas compressor and well facilities along with foothills and small canyons. The vegetation of the foothills and small canyons were primarily comprised of ruderal habitat with non-native annuals and forbs dominant such as ripgut grass (*Bromus diandrus*), red brome (*Bromus rubens*), slender wild oat (*Avena barbata*), wall barley (*Hordeum murinum*), black mustard (*Brassica nigra*), tocalote (*Centaurea melitensis*), and redstem filaree (*Erodium cicutarium*). The 2017 Rye Fire burned the entire Study Area leaving little late-successional coastal sage scrub and chaparral intact; however, some remnant patches remained in a few of the protected north- and east-facing slopes of the foothills. Plant species in these remnant patches consisted of scrub oak (*Quercus berberidifolia*), chaparral mallow (*Malacothamnus fasciculatus*), chamise (*Adenostoma fasciculatum*), toyon (*Heteromeles arbutifolia*), California buckwheat (*Eriogonum fasciculatum*), California sagebrush (*Artemisia californica*), purple sage (*Salvia leucophylla*) and black sage (*Salvia mellifera*). Most of the other portions of the Study Area were severely impacted by the fire and were comprised of a mix of early successional coastal sage scrub and ruderal habitat. This early successional coastal sage scrub is more prevalent than the remnant, relatively intact sage scrub/chaparral patches. The early successional coastal sage scrub consisted of nearly homogeneous stands of deerweed (*Acmispon glaber*) with very few scattered brittle bush (*Encelia farinosa*), California buckwheat, California sagebrush, purple sage, and black sage present in some locales. The Study Area, three Survey Areas (designated A, B, and C), and vegetation/land covers are depicted on *Figure 3 – Study Area Aerial Photograph* (Page 5). Representative photographs of the Study Area are provided in the attached Appendix A.

3.0 BACKGROUND

3.1 Regulatory Status

The USFWS listed the CAGN as Threatened under the Endangered Species Act of 1973, as amended (ESA) on March 30, 1993 (U. S. Fish and Wildlife Service, 1993). On December 10, 1993, pursuant to section 4(d) of the ESA, the USFWS defined specific conditions associated with certain land use activities under which incidental take of CAGN and their habitat would not be a violation of section 9 of the ESA (U. S. Fish and Wildlife Service, 1993). Critical habitat was originally designated for CAGN by the USFWS in 2000, revised in 2003, and revised again and finalized in 2007 (U. S. Fish and Wildlife Service, 2023).

The CAGN is also designated by the California Department of Fish and Wildlife (CDFW) as a Species of Special Concern (SSC). It is the goal and responsibility of CDFW to maintain viable populations of all native species, and the CDFW has designated certain vertebrate species as SSC because of declining population levels, limited ranges, and/or continuing threats have made them vulnerable to extinction (California Department of Fish and Wildlife, 2023).

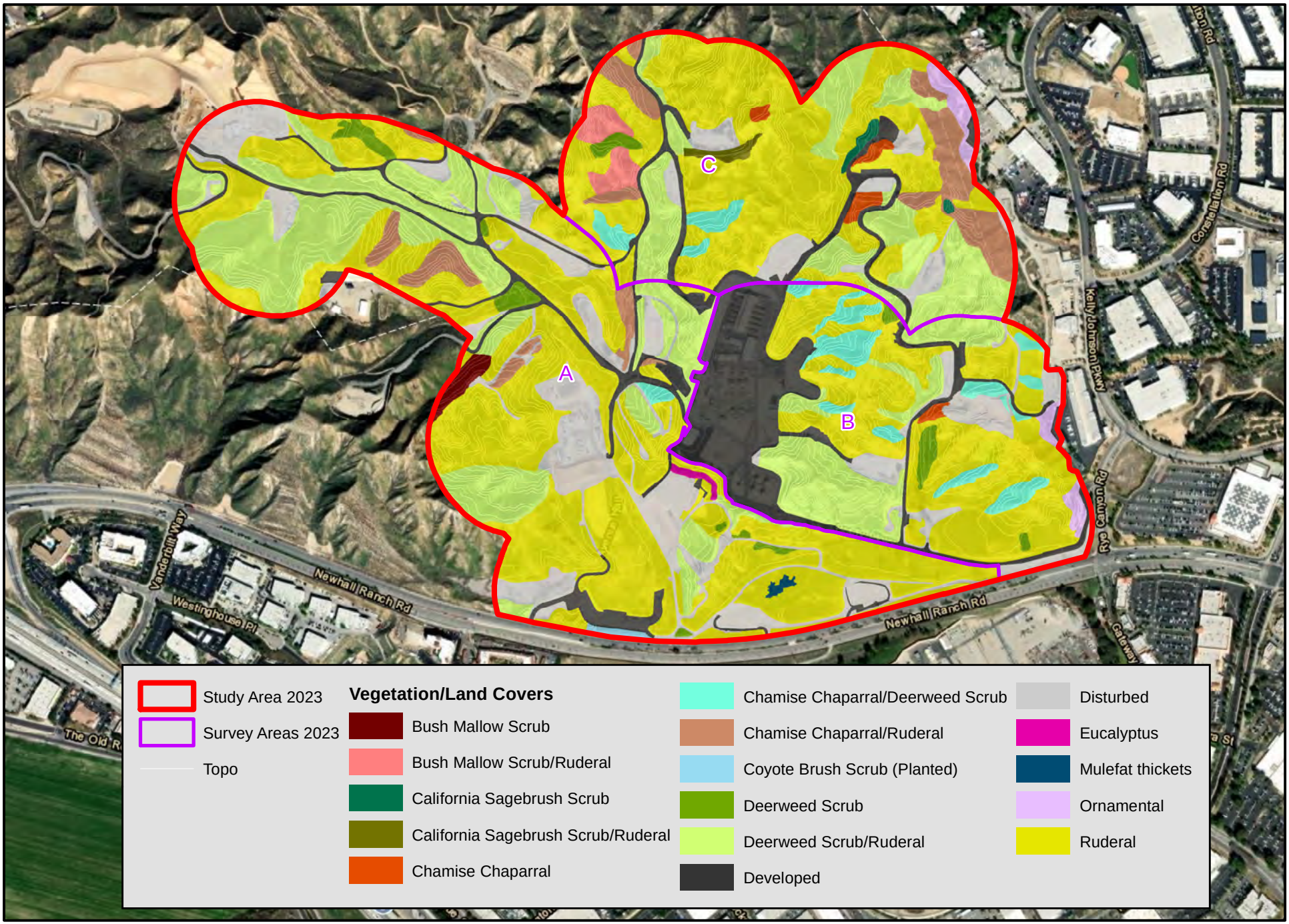


FIGURE 3
Study Area
Aerial Photograph

DATE:August 9, 2023
COORDINATE SYSTEM: NAD 1983 State Plane California Zone VI FIPS 0406 (feet)
SOURCE: ESRI World Imagery, ESRI World Transportation, SoCalGas, Caskey, SBS

PROJECT:
Honor Rancho Compressor Modernization
2023 CAGN Protocol Survey

3.2 Natural History

CAGN is a resident songbird of sage scrub dominated plant communities ranging from the coast and inland foothills of Ventura, south through Los Angeles, Orange, San Bernardino, western Riverside, and San Diego Counties, California, continuing south into northwestern Baja California, Mexico. CAGN occurs from sea level to approximately 2,500-feet msl in more inland areas of its range, though it is primarily found in scrub habitats from sea level to 1,500-feet msl (Bontrager, 1991).

CAGN is non-migratory and generally prefers open sage scrub habitats. This species is strongly associated with sage scrub habitats where California sagebrush is the dominant or co-dominant species (Mock, 2004), though it occurs in a variety of sage scrub habitats including those where California buckwheat and/or brittle bush are dominant. This notwithstanding, extensive areas of potentially suitable habitat across its range lack CAGN, and it appears that the distribution and abundance of CAGN is constrained by local winter weather patterns and sage scrub plant species composition (Mock, 2004). CAGN will also use chaparral, grassland, and riparian plant communities where they occur adjacent to or intermixed with sage scrub (U. S. Fish and Wildlife Service, 1997).

CAGN is a small songbird approximately 4.3-inches in length with a 5.5-inch wingspan (Atwood & Bontrager, 2020). It has overall gray plumage and a black tail with the outer margins edged in white. Males have a black cap while in breeding plumage, and a thin black streak over the eye while in non-breeding plumage. Both sexes have a faint white ring around the eyes.

The breeding season for CAGN extends from approximately February 15 through August 31, with the peak of nesting activity occurring from mid-March through mid-May. Incubation takes approximately 14 days. The young fledge at 8 to 13 days of age and are dependent upon their parents for as little as three to four weeks, but fledglings may associate with their parents for several months (U. S. Fish and Wildlife Service, 1997).

CAGN is an insectivore that generally forages on the ground and shrub cover where it gleans arthropods, including beetles, spiders, leafhoppers, and other small insects.

The primary threat to CAGN is habitat loss and it is estimated that 70-90% of CAGN habitat has been lost since the 1940s due to urbanization (Atwood & Bontrager, 2020). Other threats include habitat fragmentation and degradation from development, introduction of non-native grasses and forbs, increased and more intense fire regime, and possibly climate change. Other factors likely contributing to CAGN decline include predation and Brown-headed Cowbird (*Molothrus ater*) nest parasitism.

4.0 METHODS

4.1 Office Analysis

Prior to initiating field surveys, an office analysis was performed of the Study Area and its vicinity by reviewing the Newhall 7.5 Minute USGS California Quadrangle using ESRI ArcGIS, aerial imagery using Google Earth, CAGN designated critical habitat (U. S. Fish and Wildlife Service, 2021), CDFW's California Natural Diversity Database (CNDDB) (California Department of Fish and Wildlife, 2023), and eBird (The Cornell Lab of Ornithology, 2023). The analysis was conducted to ascertain the potential for presence or absence of CAGN by analyzing the topography, current and historical habitat conditions, and the Study Area's location relative to designated critical habitat. The CNDDB was queried to determine if CAGN had been documented within five miles of the Study Area, and eBird's "hotspots" map was also analyzed to determine if CAGN had been reported in the vicinity.

4.2 Habitat Assessment

A habitat assessment was initially conducted on February 24, 2021 and April 12, 2022 prior to or concurrently with the first protocol surveys in 2021 and 2022. An update habitat assessment was conducted on April 10, 2023. The habitat suitability for CAGN of the entire Study Area was assessed by conducting a "windshield survey" from a vehicle, a pedestrian survey, and scanning areas with 10 by 42 binoculars. Mapping and data collection were performed in the field utilizing both paper maps (i.e., aerial photographs and USGS topographic maps), and ESRI Field Maps installed on a smart phone (Field Maps)[1]. Field observations were also noted such as plant communities, dominant plant species, vegetation height and density, and human disturbance levels. Habitat suitability for CAGN is typically classified by SBS as Not Suitable[2], Low[3], Moderate[4], or High[5].

4.3 Focused Surveys

The surveys were conducted at least one week apart during weather conditions conducive for detecting CAGN by avoiding inclement weather such as excessive heat, high winds, and dense fog. The Study Area was divided into three Survey Areas, designated as Survey Area A, B, and C as depicted by the previously referenced Figure 3. The six required surveys were conducted on three survey dates performed sequentially for a total of 18 visits, with Survey Area A being surveyed on one day, Survey Area B on the next day, and Survey Area C on the third day. Occasionally, there was an overlap where a portion of a Survey Area was surveyed on the day prior, time and conditions permitting (i.e., a portion of Survey Area C surveyed on the second day). No more than 80-acres of suitable habitat were surveyed per day.

All suitable habitat within the Study Area, including ruderal grasslands and chaparral when adjacent or mixed with scrub habitats, was surveyed by slowly walking transects within and on the margins while stopping often to scan the area with binoculars and listen for unsolicited calls from CAGN. Subsequently, recordings of CAGN vocalizations were broadcast using a smart phone with a Bluetooth connection to a handheld speaker in an attempt to elicit a response from CAGN per the CAGN Survey Protocol and issued federal take permit. Playback vocalizations are only used to initially detect CAGN and not to produce any further behavior. Softly "pishing," an imitated bird call, was also occasionally performed to aid in potentially detecting CAGN.

Data collected on each of the surveys included start and stop times, start and stop weather conditions, number of total acres and acres per hour surveyed, survey routes, playback vocalization use, and a complete list of the wildlife observed. *Table 1 – CAGN Protocol Survey Conditions* (Page 8) provides the survey and weather conditions. A complete list of the wildlife observed over the course of the surveys is attached in Appendix B.

[1] Some data is recorded with Field Maps connected to a SXBlue II + GNSS submeter unit and antenna.
[2] The habitat lacks the required characteristics to support CAGN. Examples include developed land, land that completely lacks sage scrub or open chaparral, etc.
[3] The habitat is structurally suitable with sparse sage scrub; however, factors such as the presence of non-native grasses and forbs, habitat loss and severe fragmentation, small habitat patch size, fire regime, human activity (i.e., disking, mowing, grazing, historical use), etc. have degraded the quality of the habitat.
[4] The habitat is structurally suitable with less of the above degrading factors, and the presence of more contiguous coastal sage scrub and/or open chaparral habitat, such as chamise chaparral, but is still not "preferred" CAGN habitat.
[5] This habitat is the preferred habitat of California sagebrush, California buckwheat, and/or brittle bush scrub and provides larger blocks of contiguous habitat.

Table 1 – CAGN Protocol Survey Conditions[6]

SURVEY NUMBER	SURVEY TYPE[7]	DATE	BIOLOGIST	TIME (24hr)	TEMPERATURE (°F)	RELATIVE HUMIDITY (%)	CLOUD COVER (%)	WIND SPEED (mph)	PRECIPITAION[8] (Yes/No)	MOON PHASE (% Illuminated)
1A	FS	04/11/2023	Tim Searl	0600-1140	53-81	80-39	0-0	0-0	No	Last Quarter (67)
1B	FS	04/12/2023	Tim Searl	0600-1200	52-64	88-72	100-100*	0-3	No	Last Quarter (56)
1C	FS	04/13/2023	Tim Searl	0615-1130	52-57	87-70	100-90*	4-10	No	Last Quarter (44)
2A	FS	04/27/2023	Tim Searl	0545-1140	50-84	73-24	0-0	4-8	No	First Quarter (50)
2B	FS	04/28/2023	Tim Searl	0600-1115	55-87	73-31	0-0	1-3	No	First Quarter (59)
2C	FS	04/29/2023	Tim Searl	0600-1120	54-86	80-35	0-0	1-3	No	First Quarter (68)
3A	FS	05/09/2023	Tim Searl	0600-1200	51-59	79-71	0-100	1-10	No	Waning Gibbous (80)
3B	FS	05/10/2023	Tim Searl	0600-1145	50-70	83-54	10-20	2-10	No	Waning Gibbous (70)
3C	FS	05/11/2023	Tim Searl	0545-1030	50-71	81-51	0-0	2-4	No	Last Quarter (58)
4A	FS	06/01/2023	Tim Searl	0545-1140	59-68	76-61	90-100	1-5	No	Waxing Gibbous (94)
4B	FS	06/02/2023	Tim Searl	0545-1115	57-71	80-54	90-10	1-5	No	Full Moon (98)
4C	FS	06/03/2023	Tim Searl	0600-1030	52-70	87-57	0-0	2-4	No	Full Moon (100)
5A	FS	06/13/2023	Tim Searl	0530-1100	58-67	81-69	100-90	0-7	No	Waning Crescent (19)

[6] Temperature (Degrees Fahrenheit), Humidity (Relative; %), and Wind Speed (mean miles per hour) were obtained in the field with a Kestrel 3500 weather meter. Moon phase was obtained from The Moon App V5.1.
[7] FS: Focused Survey
[8] If measurable rain occurred during the survey

SURVEY NUMBER	SURVEY TYPE[7]	DATE	BIOLOGIST	TIME (24hr)	TEMPERATURE (°F)	RELATIVE HUMIDITY (%)	CLOUD COVER (%)	WIND SPEED (mph)	PRECIPITAION[8] (Yes/No)	MOON PHASE (% Illuminated)
5B	FS	06/14/2023	Tim Searl	0530-1100	56-74	74-57	0-30	1-6	No	Waning Crescent (11)
5C	FS	06/15/2023	Tim Searl	0545-1040	62-68	73-66	100-100	1-1	No	Waning Crescent (6)
6A	FS	06/27/2023	Tim Searl	0545-1100	58-84	65-39	0-0	1-3	No	First Quarter (65)
6B	FS	06/28/2023	Tim Searl	0545-1045	57-82	74-43	0-0	1-2	No	Waxing Gibbous (75)
6C	FS	06/29/2023	Tim Searl	0600-1045	58-81	75-43	0-0	2-3	No	Waxing Gibbous (83)
*Marine layer with good visibility										

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5.0 RESULTS

5.1 Office Analysis

The office analysis and previous protocol surveys confirmed the potential for CAGN to occupy the Study Area.

5.1.1 Aerial Imagery Review

Based on review of aerial imagery, coastal sage scrub, and to a lesser extent chaparral, appeared prevalent throughout the Study Area, particularly in the eastern half, prior to the 2017 Rye Fire. Vegetation impacts and smoke from the fire were clearly evident on aerial imagery dated December 2017 from Google Earth. Most of the coastal sage scrub and chaparral present prior to the fire was cleared by the fire and has been replaced with ruderal introduced grasses and forbs.

5.1.2 Critical Habitat

The Study Area was not located within designated critical habitat as depicted by *Figure 4 – Critical Habitat* (Page 11). The nearest critical habitat was approximately 5.5-miles south of the Study Area in the Santa Susana Mountains.

5.1.3 CNDDB Query Results and eBird

According to the CNDDB, six records of CAGN have been reported within 5-miles of the Study Area over the past 20 years in 2001, 2006, 2008, 2012, 2015, and 2019. The most recent record in 2019 occurred approximately five miles southeast of the Study Area. The nearest documented record to the Study Area was in 2012 approximately one mile southwest. According to the CNDDB, this area was graded in 2018 per aerial imagery. Much of this area has recently been developed, though it appears that some CAGN habitat was avoided. I-5 and existing development were present between the two locations at the time of this report.

SBS reviewed the five nearest eBird “hotspots” to the Study Area. CAGN was not reported.

5.2 Habitat Assessment

The Study Area depicted in Figure 3, totaling approximately 354-acres, was primarily comprised of ruderal non-native grasses and forbs as described in Section 2.3 above and developed/disturbed SoCalGas facilities. The Study Area supported a total of 106.52-acres of scrub, chaparral, and mixed scrub/chaparral/ruderal communities with 48.61-acres present in Survey Area A, 21.58-acres present in Survey Area B, and 36.33-acres present in Survey Area C. The patches of coastal sage scrub/chaparral that remained, though impacted by the Rye Fire, and those that were in recovery, consisted of low habitat suitability for CAGN. The patches of habitat within the Study Area were limited in size, fragmented, and not connected to large, contiguous blocks of sage scrub, and consisted of ruderal non-native grasses and forbs. The low habitat suitability within the Study Area was due to the 2017 Rye Fire. Additionally, the open space north of the Study Area primarily consisted of dense ruderal habitat of introduced grasses and forbs. As described above in Section 5.1.1, coastal sage scrub was more common and appeared to support higher quality habitat for CAGN prior to the fire.

5.3 Focused Surveys

CAGN was not detected within or adjacent to the Study Area during the 2023 focused surveys.

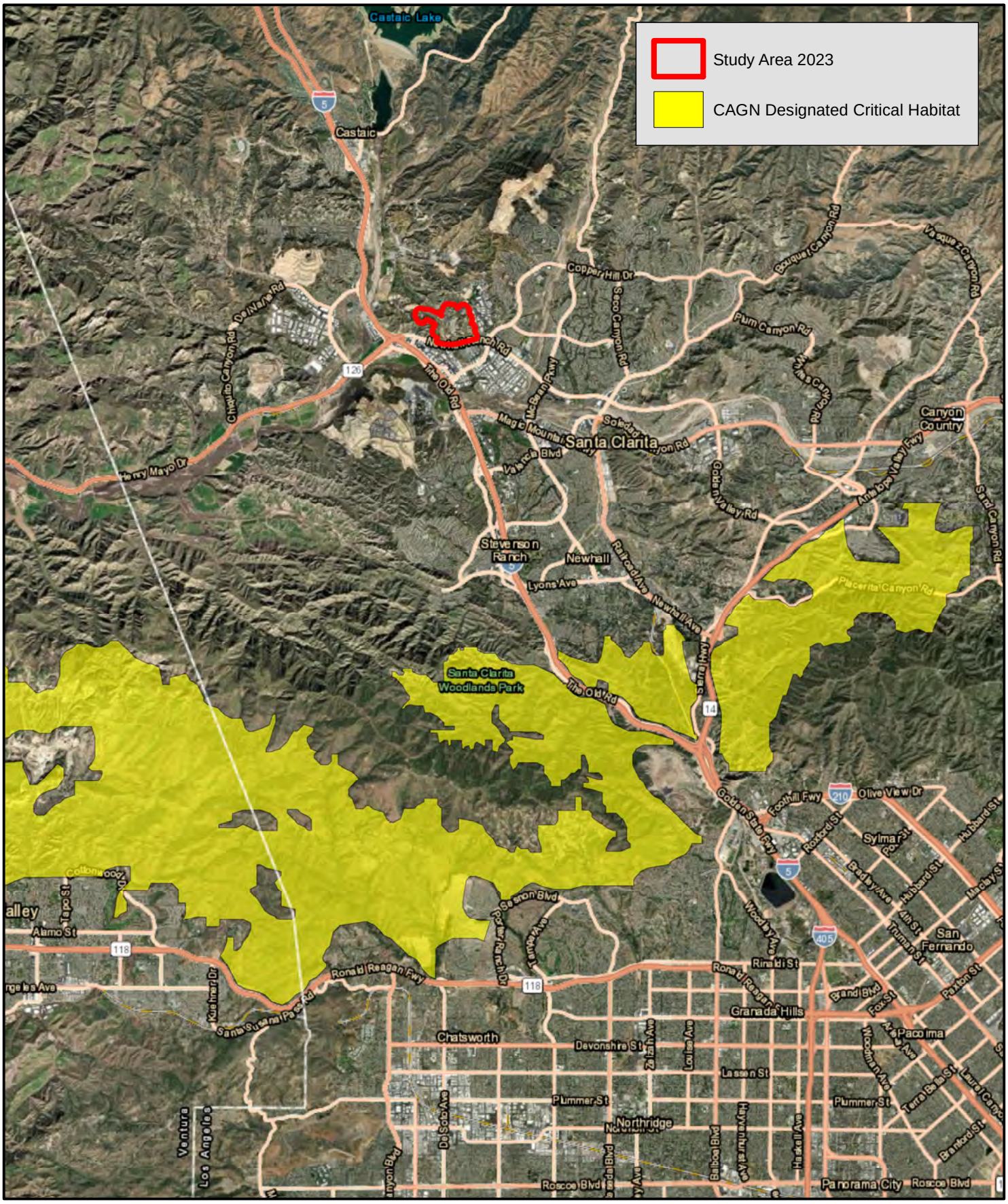

FIGURE 4
Critical Habitat

DATE: August 10, 2023
COORDINATE SYSTEM: NAD 1983 State Plane California Zone V FIPS 0406 (feet)
SOURCE: ESRI World Imagery, ESRI World Transportation, SoCalGas, Caskey, USFWS ECOS

PROJECT:
Honor Rancho
Compressor Modernization
2023 CAGN Protocol Survey

5.3.1 Other Regulatory-Status Species Detected

Five birds and one reptile listed on the CDFW's Special Animals List[9] (California Department of Fish and Wildlife, 2023) with varying degrees of status from CDFW Species of Special Concern[10] (SSC) and CDFW Watch List (WL), to no formal federal or state designation, were detected over the course of the surveys. A list of the regulatory-status species detected is presented in *Table 2 – Regulatory-Status Species Detected* (below).

Table 2 – Regulatory-Status Species Detected

SPECIES	REGULATORY STATUS	DETECTION DETAILS
Cooper's Hawk (*Accipiter cooperii*) (COHA)	CDFW WL – Nesting No formal federal status	A juvenile COHA was observed flying north of the Study Area during Survey 1C. Though some suitable nesting habitat was present in the Study Area, COHA nesting was not observed.
Costa's Hummingbird (*Calypte costae*) (COHU)	CDFW Special Animal - Nesting (No formal CDFW status designation)	COHU was commonly encountered during the protocol survey. Although no nests were searched for or observed, it is highly likely that COHU nests within the Study Area.
Lawrence's Goldfinch (*Spinus lawrencei*) (LAGO)	CDFW Special Animal - Nesting (No formal CDFW status designation)	LAGO was commonly encountered during the protocol survey. Although no nests were searched for or observed, it is highly likely that LAGO nests within the Study Area.
San Diegan Tiger Whiptail (*Aspidoscelis tigris stejnegeri*) (ASTI)	CDFW SSC	ASTI was occasionally encountered throughout the Study Area during the protocol survey.
Southern California Rufous-crowned Sparrow (*Aimophila ruficeps canescens*) (RCSP)	CDFW – WL	RCSP was abundant throughout the Study Area and was detected on each of the 18 surveys.
Yellow Warbler (*Setophaga petechia*) (YEWA)	CDFW SSC – Nesting No formal federal status	Migrant YEWA were observed in a mixed flock of YEWA and Wilson's Warbler (*Cardellina pusilla*) foraging in valley oak (*Quercus lobata*) during Survey 2B. YEWA prefers wet riparian thickets for breeding habitat, which were not present within the Study Area.

6.0 CONCLUSIONS

CAGN was not detected during the protocol surveys conducted in 2021, 2022, or 2023. Based on the negative survey results of protocol surveys, CAGN is considered absent and not currently utilizing the Study Area as a breeding territory. Habitat suitability throughout the Study Area was low, and the condition of the scrub/chaparral communities was like those observed in 2021 and 2022. Early successional species, resprouts, and ruderal habitats were still dominant with little recovery of the native habitats observed.

Survey Area C, the new area added to the protocol survey in 2023, was connected to open space to the north of the Study Area. The offsite open space area was also severely impacted by the 2017 Rye Fire. During

[9]"Special Animals" is a broad term used to refer to all the animal taxa tracked by the CDFW CNDDB, regardless of their legal or protection status (California Department of Fish and Wildlife, 2023).

[10] [CDFW] has designated certain vertebrate species as "Species of Special Concern" because declining population levels, limited ranges, and/or continuing threats have made them vulnerable to extinction. The goal of designating SSCs is to halt or reverse their decline by calling attention to their plight and addressing the issues of concern early enough to secure their long-term viability (California Department of Fish and Wildlife, 2023).

the office analysis, this area, similar to the Study Area, appeared to support a much higher density and abundance of sage scrub and chaparral communities prior to the fire based on Google Earth aerial imagery. Tim Searl often initiated the protocol survey of Survey Area C by entering from the northern offsite end and visually inspected the open space area to the north. Ruderal introduced grasses and forbs were dominant throughout the area with very little sage scrub (i.e., suitable CAGN habitat) present.

Based on three years of negative survey results, SBS recommends that no additional protocol surveys be required for a duration of five years, unless SoCalGas alters the project footprint that would encapsulate new areas that have not been previously surveyed. This notwithstanding, SBS does recommend the following CAGN avoidance and minimization measures if the proposed project commences ground disturbance/grading operations in the next five years.

1. If grading occurs during the CAGN breeding season, at least three presence/absence surveys shall be conducted one week apart per the *USFWS CAGN Presence/Absence Survey Guidelines* prior to the proposed project's ground disturbance activities.
2. If measure 1 results in the detection of CAGN, then a CAGN-permitted biologist shall conduct full-time biological monitoring during grading operations and will have the authority to establish a 300-foot no disturbance buffer around active nests if present.

7.0 REFERENCES

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8.0 CERTIFICATION

I hereby certify that the statements furnished above, the associated figures, and the attached appendices present data and information required for this biological evaluation, and that the facts, statements, and information presented are true and correct based on my professional experience and opinion.

Signed: Tim Searl Date: August 11, 2023

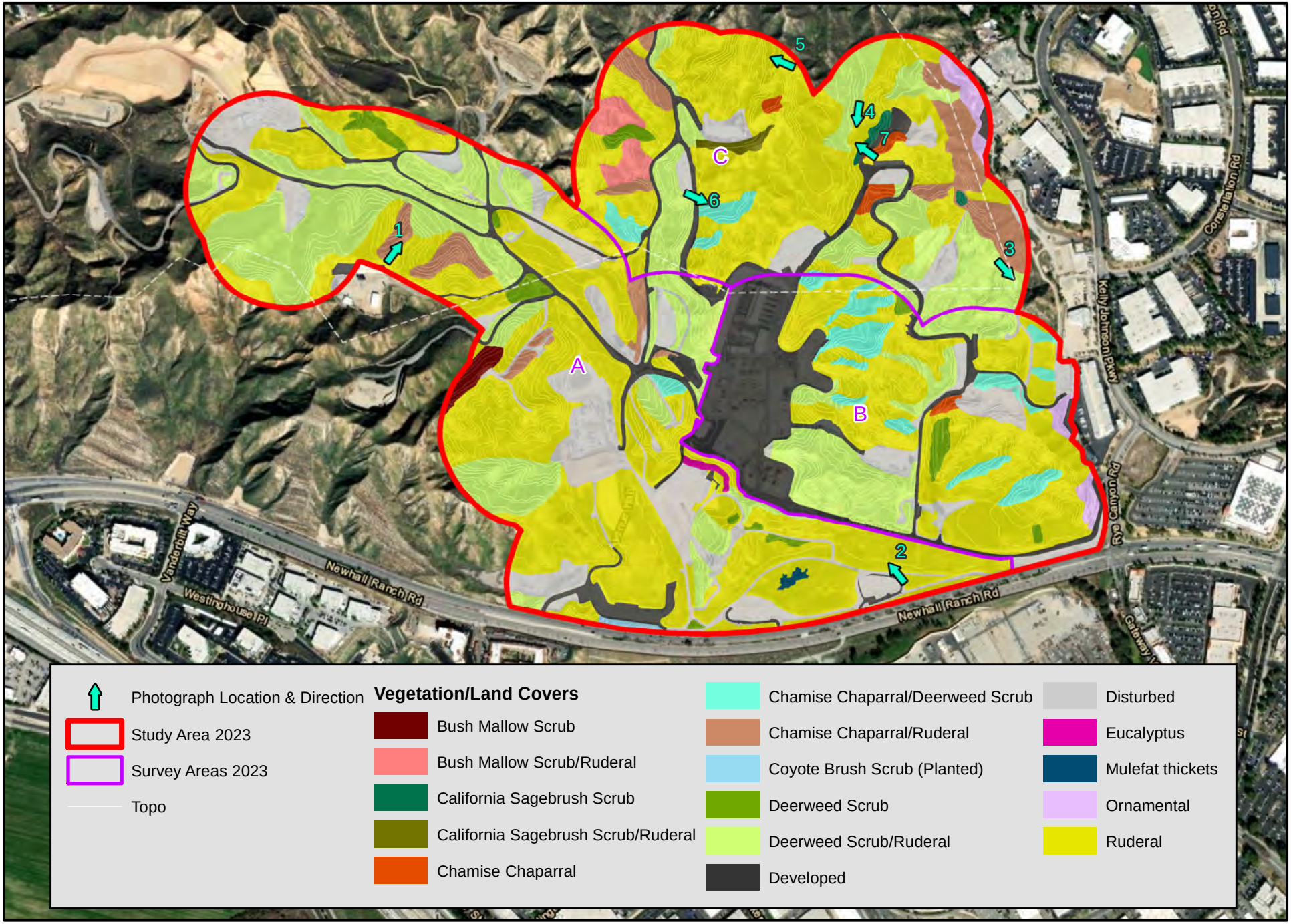
Tim Searl, Biologist, Searl Biological Services
USFWS Native E&T Recovery Permit Number: ES02351A
CDFW SCP/MOU Number: SC-183620001

FIGURE DISCLAIMER

Figures and data are to be used for reference purposes only. Map features are approximate and are not necessarily accurate to surveying or engineering standards. Tim Searl, SBS makes no warranty or guarantee as to the content (the source is often third party), accuracy, timeliness, or completeness of any of the data provided, and assumes no legal responsibility for the information contained on any of the Figures associated with this report.

APPENDIX A

Assessment Photographs



N

0 500 1,000 2,000 3,000 4,000 Feet

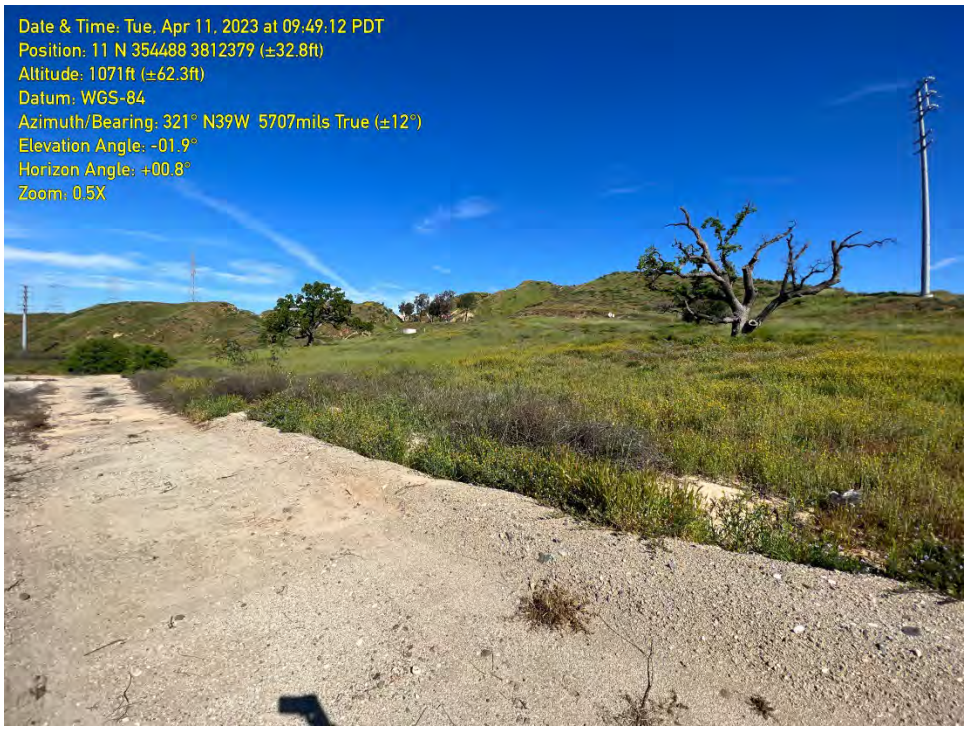
1 inch = 833 feet

APPENDIX B
Assessment Photographs Key Map

DATE: August 11, 2023
COORDINATE SYSTEM: NAD 1983 State Plane California Zone VI FIPS 0406 (feet)
SOURCE: ESRI World Imagery, ESRI World Transportation, SoCalGas, Caskey, SBS

PROJECT:
Honor Rancho Compressor Modernization
2023 CAGN Protocol Survey

PHOTOGRAPH 1: A northerly view in Survey Area A depicting both chamise chaparral/ruderal (in recovery) and ruderal.



PHOTOGRAPH 2: Ruderal habitat in the Study Area. Some valley oak and blue elderberry, and gum trees in the background.

PHOTOGRAPH 3: Deerweed scrub/ruderal habitat in the foreground. The chaparral in the background was outside of the Study Area.

PHOTOGRAPH 4: Habitat conditions in Survey Area C.

PHOTOGRAPH 5: Ruderal introduced grasses and forbs were dominant throughout the Study Area.

PHOTOGRAPH 6: A mix of chamise and deerweed on a north-facing slope. Scrub oak was also present in this area.

PHOTOGRAPH 7: A small patch of California sagebrush scrub in Survey Area C.

APPENDIX B

Wildlife Observed

Birds

The bird species listed below were detected visually or aurally either on, above, or near the Study Area during a CAGN protocol survey in 2023. The list below is presented in alphabetic order. Nomenclature for the Family (i.e., Icteridae), Common Name, and Scientific Name follow the American Ornithological Society *Checklist of North and Middle American Birds*. Introduced species are indicated with an (I).

COMMON NAME	SCIENTIFIC NAME
Blackbirds	**Icteridae**
Bullock's Oriole	*Icterus bullockii*
Great-tailed Grackle	*Quiscalus mexicanus*
Hooded Oriole	*Icterus cucullatus*
Caracaras and Falcons	**Falconidae**
American Kestrel	*Falco sparverius*
Cardinals and Allies	**Cardinalidae**
Black-headed Grosbeak	*Pheucticus melanocephalus*
Blue Grosbeak	*Passerina caerulea*
Lazuli Bunting	*Passerina amoena*
Western Tanager	*Piranga ludoviciana*
Chickadees and Titmice	**Paridae**
Oak Titmouse	*Baeolophus inornatus*
Crows and Jays	**Corvidae**
American Crow	*Corvus brachyrhynchos*
California Scrub-Jay	*Aphelocoma californica*
Common Raven	*Corvus corax*
Ducks, Geese, and Swans	**Anatidae**
Canada Goose	*Branta canadensis*
Fringilline and Cardueline Finches and Allies	**Fringillidae**
American Goldfinch	*Spinus tristis*
House Finch	*Haemorhous mexicanus*
Lawrence's Goldfinch	*Spinus lawrencei*
Lesser Goldfinch	*Spinus psaltria*
Hawks, Kites, Eagles, and Allies	**Accipitridae**
Cooper's Hawk	*Accipiter cooperii*
Red-shouldered Hawk	*Buteo lineatus*
Red-tailed Hawk	*Buteo jamaicensis*
Hummingbirds	**Trochilidae**
Allen's Hummingbird	*Selasphorus sasin*
Anna's Hummingbird	*Calypte anna*
Costa's Hummingbird	*Calypte costae*
Lapwings and Plovers	**Charadriidae**
Killdeer	*Charadrius vociferus*
Long-tailed Tits and Bushtits	**Aegithalidae**
Bushtit	*Psaltriparus minimus*
Mockingbirds and Thrashers	**Mimidae**
California Thrasher	*Toxostoma redivivum*
Northern Mockingbird	*Mimus polyglottos*
New World Quail	**Odontophoridae**
California Quail	*Callipepla californica*

COMMON NAME	SCIENTIFIC NAME
New World Sparrows	**Passerellidae**
California Towhee	*Melozone crissalis*
Dark-eyed Junco	*Junco hyemalis*
Lark Sparrow	*Chondestes grammacus*
Savannah Sparrow	*Passerculus sandwichensis*
Southern California Rufous-crowned Sparrow	*Aimophila ruficeps canescens*
Spotted Towhee	*Pipilo maculatus*
White-crowned Sparrow	*Zonotrichia leucophrys*
New World Vultures	**Cathartidae**
Turkey Vulture	*Cathartes aura*
Old World Sparrows	**Passeridae**
House Sparrow (I)	*Passer domesticus*
Pigeons and Doves	**Columbidae**
Eurasian Collared-Dove (I)	*Streptopelia decaocto*
Mourning Dove	*Zenaida macroura*
Rock Pigeon (I)	*Columba livia*
Silky-flycatchers	**Ptiliogonatidae**
Phainopepla	*Phainopepla nitens*
Starlings	**Sturnidae**
European Starling (I)	*Sturnus vulgaris*
Swallows	**Hirundinidae**
Barn Swallow	*Hirundo rustica*
Cliff Swallow	*Petrochelidon pyrrhonota*
Northern Rough-winged Swallow	*Stelgidopteryx serripennis*
Swifts	**Apodidae**
White-throated Swift	*Aeronautes saxatalis*
Sylviid Warblers	**Sylviidae**
Wrentit	*Chamaea fasciata*
Tyrant Flycatchers	**Tyrannidae**
Ash-throated Flycatcher	*Myiarchus cinerascens*
Black Phoebe	*Sayornis nigricans*
Cassin's Kingbird	*Tyrannus vociferans*
Say's Phoebe	*Sayornis saya*
Western Kingbird	*Tyrannus verticalis*
Wagtails and Pipits	**Motacillidae**
American Pipit	*Anthus rubescens*
Woodpeckers and Allies	**Picidae**
Acorn Woodpecker	*Melanerpes formicivorus*
Northern Flicker	*Colaptes auratus*
Nuttall's Woodpecker	*Dryobates nuttallii*
Wood-Warblers	**Parulidae**
Wilson's Warbler	*Cardellina pusilla*
Yellow-rumped Warbler	*Setophaga coronata*
Yellow Warbler	*Setophaga petechia*
Wrens	**Troglodytidae**
Bewick's Wren	*Thryomanes bewickii*
House Wren	*Troglodytes aedon*

Mammals

The mammals listed below were observed on or near the Study Area through sign and/or physical sightings during a CAGN protocol survey in 2023. The list below is presented in alphabetic order. Nomenclature for the Family (i.e., Canidae), Common Name, and Scientific Name follow *Wilson & Reeder's Mammal Species of the World*.

COMMON NAME	SCIENTIFIC NAME
Cats	**Felidae**
bobcat	*Lynx rufus*
Coatis, Raccoons, and Relatives	**Procyonidae**
northern raccoon	*Procyon lotor*
Coyotes, Dogs, Foxes, Jackals, and Wolves	**Canidae**
coyote	*Canis latrans*
Deer	**Cervidae**
mule deer	*Odocoileus hemionus*
Hares and Rabbits	**Leporidae**
desert cottontail	*Sylvilagus audubonii*
Pocket Gophers	**Geomyidae**
Botta's pocket gopher	*Thomomys bottae*
Squirrels	**Sciuridae**
California ground squirrel	*Spermophilus beecheyi*

Herpetofauna

The herpetofauna listed below were detected during a CAGN protocol survey in 2023. The list below is presented in alphabetic order. Nomenclature for the Family (i.e., Colubridae), Common Name, and Scientific Name follow the Society for the Study of Amphibian and Reptiles (SSAR) *Standard English and Scientific Names*.

COMMON NAME	SCIENTIFIC NAME
AMPHIBIANS	
True Toads	**Bufonidae**
Western Toad	*Anaxyrus boreas*
REPTILES	
Colubrids	**Colubridae**
San Diego Gophersnake	*Pituophis catenifer annectens*
Whiptails and Racerunners	**Teiidae**
San Diegan Tiger Whiptail	*Aspidoscelis tigris stejnegeri*
Zebra-tailed, Earless, Fringe-toed, Spiny, Tree, Side-blotched, and Horned Lizards	**Phrynosomatidae**
Great Basin Fence Lizard	*Sceloporus occidentalis longipes*
Western Side-blotched Lizard	*Uta stansburiana elegans*

Appendix F: Least Bell’s Vireo Survey Results

LEAST BELL'S VIREO PRESENCE/ABSENCE PROTOCOL SURVEY REPORT
Honor Rancho Compressor Modernization
Los Angeles County, California

Prepared for:

United States Fish and Wildlife Service
Ventura Fish and Wildlife Office (VFWO)
2493 Portola Road, Suite B
Ventura, CA 93003

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September 12, 2023

Table of Contents

List of Tables

List of Figures

List of Appendices

1.0 EXECUTIVE SUMMARY

A Least Bell's Vireo (*Vireo bellii pusillus*) (LBVI) protocol presence/absence survey (protocol survey) was conducted in marginally suitable habitat within 500-feet of the proposed Honor Rancho Compressor Modernization Project (Study Area) by Searl Biological Services' (SBS) biologist Tim Searl (ES02351A) during the Spring and Summer 2023. Eight surveys were performed between April 14 and July 26, 2023 per the U. S. Fish and Wildlife Service (USFWS) January 19, 2001 *Least Bell's Vireo Survey Guidelines* (U. S. Department of the Interior Fish and Wildlife Service 2001) (LBVI Survey Protocol).

A protocol survey was initiated in 2022 due to an incidental detection of a singing LBVI male during a protocol presence/absence survey for Coastal California Gnatcatcher (*Polioptila californica californica*) on April 12, 2022 in marginal habitat consisting of a 0.22-acre patch of open, mulefat (*Baccharis salicifolia* subsp. *salicifolia*) thicket. It was suspected that the LBVI used the patch of mulefat to seek refuge from extremely high winds that occurred the night before the April 12 detection. The northerly wind gust recorded on that night in the Santa Clarita Canyon area reached upwards of 40.0 miles per hour (mph). The majority of the Study Area was shielded from those northerly winds with its hilly terrain likely making it an ideal location to seek refuge and rest. LBVI was not detected during the 2022 protocol survey after the incidental detection.

The 2023 protocol presence/absence survey was conducted to ascertain whether LBVI use the mulefat thicket patch. LBVI was not detected during the 2023 protocol survey.

2.0 INTRODUCTION

The purpose of this protocol survey was to determine LBVI use within the Study Area for Southern California Gas Company's (SoCalGas) proposed Honor Rancho Compressor Modernization Project (Project). The protocol survey was performed, and this report prepared, according to the requirements of the LBVI Survey Protocol.

2.1 Project Location

The Study Area was located south of the community of Castaic, in the northern portion of Los Angeles County, California, approximately one aerial mile east of the Newhall Ranch Road and Interstate 5 (I-5) intersection. Portions of the Study Area were within the City of Santa Clarita. *Figure 1 - Regional Map* (Page 2) depicts the general location of the Study Area.

The Study Area was geographically located in the Newhall 7.5 Minute United States Geological Survey (USGS) California Quadrangle. *Figure 2 - USGS Topographic Map* (Page 3) depicts the Study Area's geographic location. Elevations on the Study Area ranged from approximately 1,060-feet to 1,380-feet above mean sea level (msl). The Universal Transverse Mercator (UTM) coordinates of the approximate center of the Study Area was Zone 11N; 354,109-meters East; 3,812,869-meters North; North American Datum 1983 (NAD83).

2.2 Project Description

The modernized facility would include the following replacement equipment subject to South Coast Air Quality Management District (AQMD) permitting:

- Four compressor gas lean-burn engines, each rated at approximately 5,000 horsepower (HP), with post-combustion emission control systems;
- One aboveground 8,000-gallon aqueous urea storage tank.

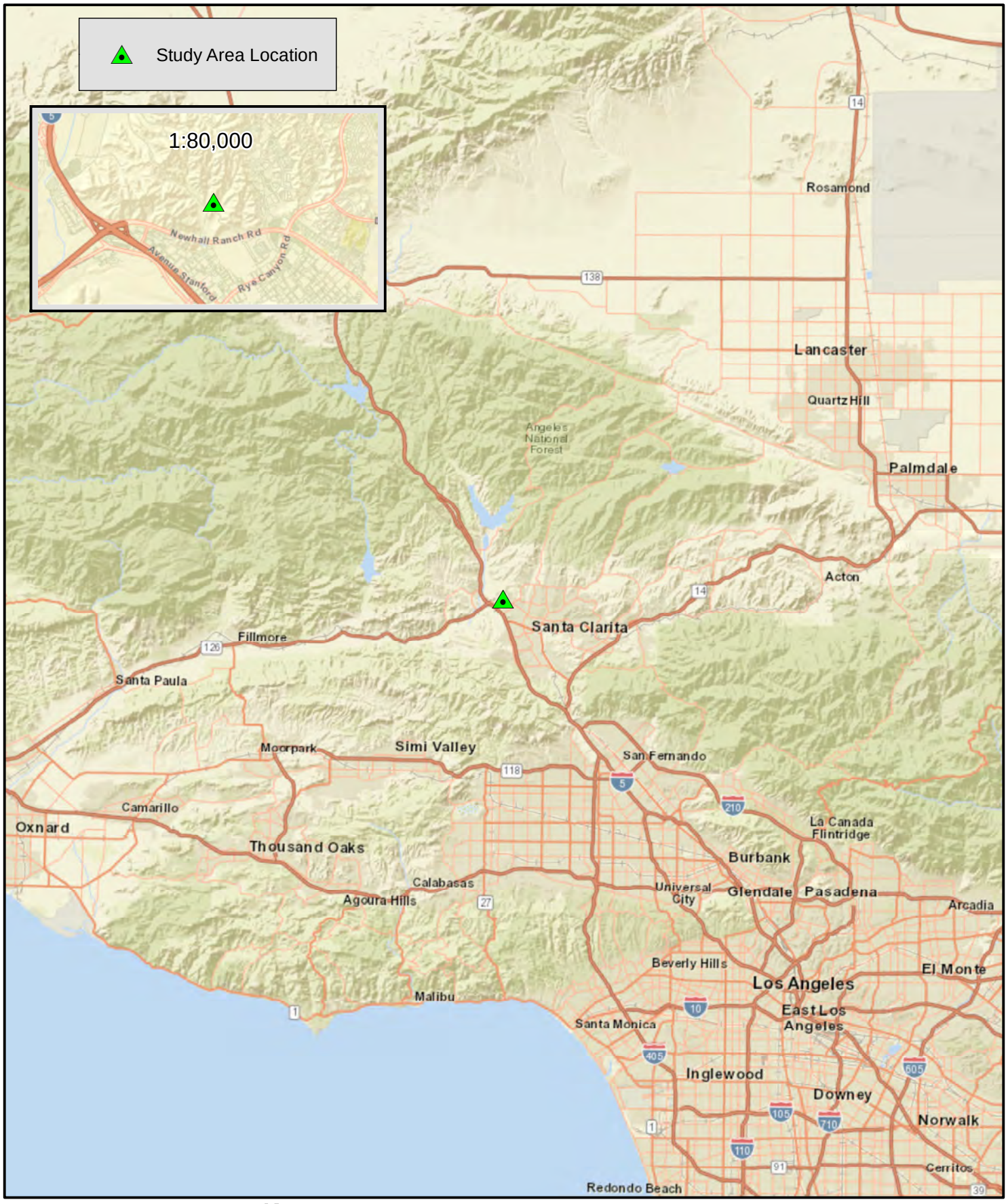
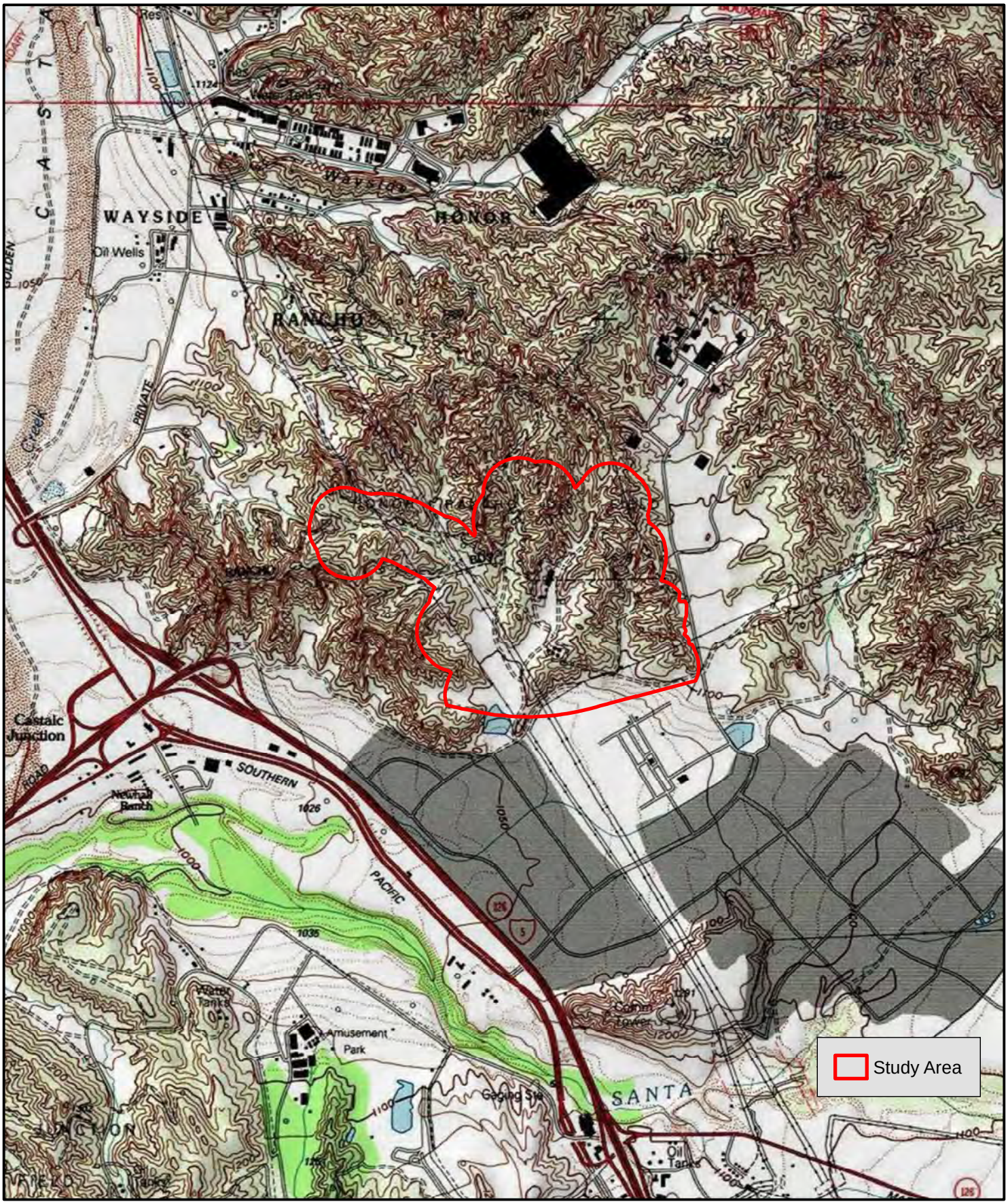


FIGURE 1
Regional Location

DATE: September 5, 2023
COORDINATE SYSTEM: NAD 1983 UTM Zone 11
SOURCE: ESRI World Street Map

PROJECT:
Honor Rancho
Compressor Modernization
2023 LBVI Protocol Survey



N

0 0.25 0.5 1 Miles

1:24,000

FIGURE 2
USGS Topographic Map

DATE:September 5, 2023
COORDINATE SYSTEM: NAD 1983 State Plane California Zone V FIPS 0406 (feet)
SOURCE: ESRI USA Topo Maps, SoCalGas

PROJECT:
Honor Rancho
Compressor Modernization
2023 LBVI Protocol Survey

Ancillary equipment would also be installed, including the following equipment not subject to permitting by the South Coast AQMD:

- Two electric motor-driven compressors (EDCs), each approximately 5,500 HP;
- Hydrogen generation, storage, blending, and dispensing equipment;
- Green hydrogen fueling station for company vehicles;
- Microgrid comprising electric generation sources, as well as an energy storage system (ESS) and a solid oxide fuel cell (SOFC) system to generate electricity to support auxiliary and administrative electrical loads while reducing the need for onsite combustion engine electricity generation;
- Compression support equipment, including cooling towers, lube oil system, tanks, filter/separators and control, electrical, and instrumentation equipment;
- Southern California Edison Substation and Electrical Interconnection.

2.3 Regulatory Status

The USFWS listed the LBVI as Endangered under the Endangered Species Act of 1973, as amended (ESA) on May 2, 1986 (U.S. Fish & Wildlife Service 2023). Critical habitat was revised and ultimately designated for LBVI by the USFWS on February 2, 1994 (U.S. Fish & Wildlife Service 2023).

The LBVI was designated by the California Department of Fish and Game Commission (CDFGC) as Endangered under the California Endangered Species Act (CESA) prior to the federal listing on October 2, 1980 (California Department of Fish & Wildlife 2023).

2.4 Life History

The LBVI subspecies breeds within California and northern Baja California, Mexico. The wintering range of the subspecies includes southern Baja California, Mexico. Breeding habitats may include willow (*Salix* spp.) woodlands, stands of mulefat, brushy fields, scrub oak (*Quercus berberidifolia*), coastal chaparral, and mesquite *(Prosopis* spp.) patches with dense, early successional understories. Although it inhabits riparian woodlands, it was found that individuals benefited from using both riparian and non-riparian ecosystems (Kus, et al. 2020).

LBVI is a small, active songbird approximately 4.5 to 5.0 inches in length with a wingspan of 6.7 to 7.5 inches (U.S. Fish and Wildlife Service 2021). It generally has drab gray plumage throughout, two pale wing bars, and a faint white eye ring. Males and females are sexually monomorphic in plumage coloration.

The breeding season for LBVI ranges from late March to the beginning of August, with the peak of nesting activity from the beginning of April through the end of July. Incubation takes approximately 14 days, and young fledge approximately 10 to 12 days after hatching.

LBVI is an insectivore that forages at all vegetative levels from the ground to approximately 60 feet above ground level but concentrated in lower to mid-level canopies. LBVI exhibit preferences for black willow (*Salix gooddingii*) relative to its cover within territories, but forage on other plant species depending on availability (Kus, et al. 2020).

The two major factors in the decline of LBVI populations are loss of habitat and nest parasitism by the Brown-headed Cowbird (*Molothrus ater*) (Kus, et al. 2020). Habitat restoration through removal of invasive non-native plants such as giant reed (*Arundo donax*) and re-planting of native riparian species, and brown-headed cowbird control have been the two primary measures to conserve LBVI populations (Kus, et al. 2020).

3.0 STUDY AREA

3.1 Study Area Description

The Study Area consisted of the proposed area encompassing the Honor Rancho Compressor Modernization Project and a 500-foot buffer, which included the SoCalGas compressor and well facilities along with foothills and small canyons. The foothills and small canyons were primarily comprised of ruderal habitat with non-native annuals and forbs dominant such as ripgut grass (*Bromus diandrus*), red brome (*Bromus rubens*), slender wild oat (*Avena barbata*), wall barley (*Hordeum murinum*), black mustard (*Brassica nigra*), tocalote (*Centaurea melitensis*), and redstem filaree (*Erodium cicutarium*). The 2017 Rye Fire burned the entire Study Area leaving little late-successional coastal sage scrub and chaparral intact; however, some remnant patches remained in a few of the protected north and east-facing slopes of the foothills. Plant species in these remnant patches consisted of scrub oak (*Quercus berberidifolia*), chaparral mallow (*Malacothamnus fasciculatus*), chamise (*Adenostoma fasciculatum*), toyon (*Heteromeles arbutifolia*), California buckwheat (*Eriogonum fasciculatum*), California sagebrush (*Artemisia californica*), purple sage (*Salvia leucophylla*) and black sage (*Salvia mellifera*). Most of the other portions of the Study Area were severely impacted by the fire and were comprised of a mix of early successional coastal sage scrub and ruderal habitat. This early successional coastal sage scrub is much more prevalent than the remnant, relatively intact sage scrub/chaparral patches. The early successional coastal sage scrub consisted of nearly homogeneous stands of deerweed (*Acmispon glaber*) with very few scattered brittle bush (*Encelia farinosa*), California buckwheat, California sagebrush, purple sage, and black sage present in some locales. The Study Area is depicted on *Figure 3 – Study Area Aerial Photograph* (Page 6).

3.1.1 Survey Area Description

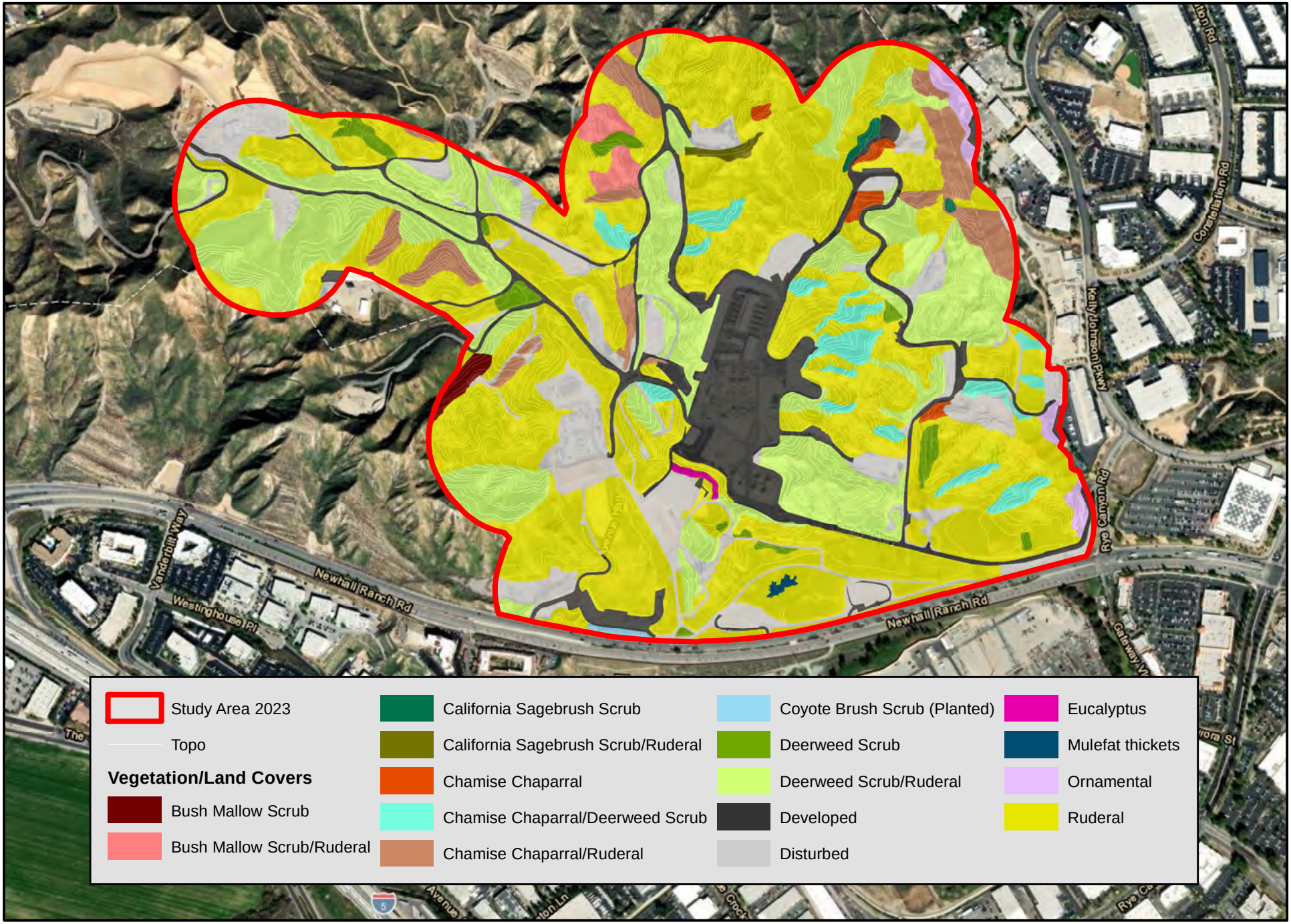
A 0.30-acre[1] patch of mulefat was present in a low-lying area in the southern portion of the Study Area. No evidence of long-duration ponding was observed in the area. A few coyote brush (*Baccharis pilularis*), two blue elderberry (*Sambucus mexicana*), and a single valley oak (*Quercus lobata*) were also present. The surrounding area primarily consisted of ruderal habitat of dense introduced grasses and forbs. The Survey Area was also impacted by the 2017 Rye Fire as indicated by the charred branches of the shrubs/trees present. A more detailed view of the Survey Area is depicted on *Figure 4 – Survey Area* (Page 7). Representative photographs of the Survey Area are provided in the attached Appendix A.

4.0 METHODS

4.1 Office Analysis

Prior to initiating field surveys, an office analysis of the Study Area and its vicinity by reviewing the Newhall 7.5 Minute USGS California Quadrangle using ESRI ArcGIS, aerial imagery using Google Earth, LBVI designated critical habitat (U.S. Fish & Wildlife Service 2023), CDFW's California Natural Diversity Database (CNDDB) (California Department of Fish and Wildlife 2023), and eBird Hotspots (The Cornell Lab of Ornithology 2023). The analysis was conducted to ascertain LBVI use of the area, current and historical habitat conditions, and the Study Area's location relative to designated critical habitat. The CNDDB was queried to determine if LBVI had been documented within five miles of the Study Area. The Cornell Lab of Ornithology's eBird's "Hotspots" map was also analyzed to determine if LBVI had been reported in the vicinity.

[1] The Study Area was expanded in 2023 to formally include additional area. Though the Survey Area formally increased to 0.30-acre in 2023 from 0.22-acre in 2022, the entire 0.30-acre mulefat thicket was surveyed in 2022.



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N

0 500 1,000 2,000 3,000 4,000 Feet

1 inch = 833 feet

FIGURE 3
Study Area
Aerial Photograph

DATE: September 6, 2023
COORDINATE SYSTEM: NAD 1983 State Plane California Zone VI FIPS 0406 (feet)
SOURCE: ESRI World Imagery, ESRI World Transportation, SoCalGas, Caskey, SBS

PROJECT:
Honor Rancho Compressor Modernization
2023 LBVI Protocol Survey

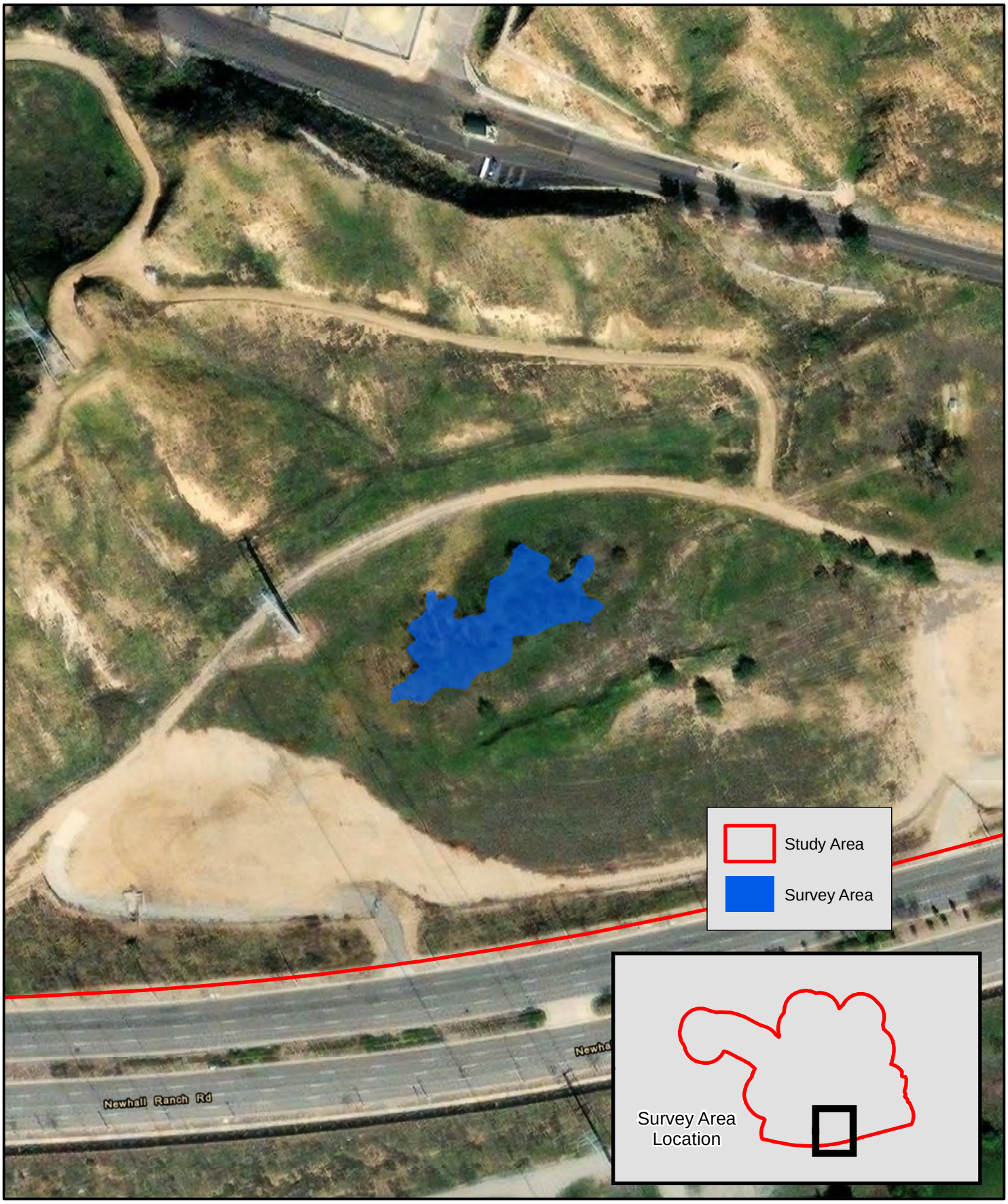

FIGURE 4
Survey Area

DATE: September 6, 2023
COORDINATE SYSTEM: NAD 1983 State Plane California Zone V FIPS 0406 (feet)
SOURCE: ESRI World Imagery, ESRI World Transportation, SoCalGas, Caskey, SBS

PROJECT:
Honor Rancho
Compressor Modernization
2023 LBVI Protocol Survey

4.2 Habitat Assessment

Tim Searl mapped the vegetation/land covers of the Study Area over several site visits performed in 2022 and the expanded areas in 2023. The 0.30-acre patch of open and isolated mulefat was not anticipated or considered suitable to support nesting LBVI; however, after the detection of LBVI in 2022 and the negative protocol survey results in 2022, it was determined that an additional protocol survey be performed in 2023 to ultimately determine the status and use of the marginal habitat by LBVI.

Mapping and data collection were performed on a subsequent visit in the field utilizing both paper maps (i.e., aerial photographs and USGS topographic maps), and the ESRI Field Maps application installed on a smart phone (ESRI Field Maps)[2]. Field observations were also noted such as plant communities, dominant plant species, vegetation height and density, and disturbance levels. Habitat suitability for LBVI is typically classified by SBS as Not Suitable[3], Low/Marginal[4], Moderate[5], or High[6].

4.3 Focused Surveys

The eight focused surveys[7] were performed on April 14, April 30, May 12, June 4, June 16, June 30, July 13, and July 26, 2023. The surveys were conducted during weather conditions conducive for detecting LBVI by avoiding inclement weather such as excessive heat, high winds, and dense fog.

All suitable habitat within the Study Area, including adjacent upland areas, was surveyed by slowly walking along the margins while stopping often to scan the area with binoculars and listen for calls from LBVI. Softly "pishing," an imitated bird call, was also occasionally performed to aid in potentially detecting LBVI.

Data collected on each of the surveys included start and stop times, start and stop weather conditions, survey routes, and a complete list of the wildlife observed. *Table 1 – LBVI Assessment Conditions* (Page 9) provides the survey conditions. A complete list of the wildlife observed over the course of the surveys is attached in Appendix B.

5.0 RESULTS

5.1 Office Analysis

The office analysis confirmed LBVI presence within five miles of the Study Area.

5.1.1 Aerial Imagery Review

Based on review of aerial imagery from Google Earth, prior to the construction of Newhall Ranch Road from 1994 to 2006, the Survey Area consisted of dense scrub habitat and potentially a few scattered trees at the terminus of a wash. By 2008, Newhall Ranch Road was constructed resulting in the current

[2] Some data are recorded with ESRI Field Maps connected to a SXBlue II + GNSS submeter unit and antenna.
[3] The habitat lacks the required characteristics to support LBVI. Examples include developed land, land that completely lacks riparian areas, etc.
[4] The habitat is structurally suitable with sparse riparian habitat; however, factors such as the presence of non-native vegetation, habitat loss and severe fragmentation, small habitat patch size, fire regime, human activity (i.e., disking, mowing, grazing, historical use), etc. have degraded the quality of the habitat to the point where LBVI would likely not occupy the area.
[5] The habitat is structurally suitable with less of the above degrading factors, and the presence of more contiguous riparian habitat.
[6] This habitat is the preferred habitat of LBVI with dense riparian habitat with multi-structured canopy levels (i.e., forb/shrub/tree layers) and provides larger blocks of contiguous habitat.
[7] It is important to note that the Survey Area was also surveyed an additional six times as part of a CAGN protocol survey through June 2023, typically three days before the LBVI protocol survey. No LBVI was detected during those surveys.

Table 1 – LBVI Assessment Conditions[8]

PROTOCOL SURVEY NUMBER	SURVEY TYPE[9]	DATE	BIOLOGIST	TIME (24hr)	SUNRISE	TEMPERATURE (°F)	RELATIVE HUMIDITY (%)	CLOUD COVER (%)	WIND SPEED (mph)	PRECIP.[10] (Yes/No)	MOON PHASE (% Illuminated)
1	FS	4/14/2023	Tim Searl	0630-0745	0619	51-49	81-87	100-90	0-0	No	Last Quarter (33)
2	FS/FM	4/30/2023	Tim Searl	0600-0900	0601	56-58	78-83	100*-100*	1-2	No	Waxing Gibbous (77)
3	FS	5/12/2023	Tim Searl	0600-0710	0550	52-55	76-76	0-0	2-2	No	Last Quarter (47)
4	FS	6/4/2023	Tim Searl	0600-0715	0538	59-59	79-82	100*-100*	1-2	No	Full Moon (99)
5	FS	6/16/2023	Tim Searl	0600-0710	0537	63-63	78-80	100-100	0-1	No	New Moon (2)
6	FS	6/30/2023	Tim Searl	0515-0620	0541	61-61	75-76	0-0	2-2	No	Waxing Gibbous (91)
7	FS	7/13/2023	Tim Searl	0540-0645	0547	66-66	41-43	0-0	2-1	No	Waning Crescent (14)
8	FS	7/26/2023	Tim Searl	0545-0640	0556	72-70	58-68	20-30	1-1	No	First Quarter (60)
*High fog w/good visibility											

[8] Temperature (Degrees Fahrenheit), Humidity (Relative; %), and Wind Speed (mean miles per hour) were obtained in the field with a Kestrel 3500 weather meter. Sunrise data was obtained from the Sunset and Sunrise application Version 4.9.0. Moon phase was obtained from The Moon App V5.1.
[9] FS: Focused Survey; FM: Field Mapping (i.e., habitat, vegetation/land covers, etc.)
[10] If measurable rain occurred during the survey

configuration of the area and removal of the wash. The scrub habitat appeared denser from 2011 until the 2017 Rye Fire when the entire area was burned.

5.1.2 Critical Habitat

The Study Area was not located within designated critical habitat for LBVI. The nearest critical habitat was approximately 0.4-mile southwest in the Santa Clara River. *Figure 5 – Critical Habitat* (Page 11) depicts the location of the nearest critical habitat.

5.1.3 Query Results

According to the CNDDB, six records of LBVI have been reported within five miles of the Study Area in 1978, 2005, 2006, 2007, 2010, and 2016. The nearest recent documented record to the Study Area was in 2010 approximately 0.5-mile southwest in the Santa Clara River/Castaic Creek confluence. 11 LBVI were detected between April 11 and July 3 with "breeding and nesting behavior observed."

SBS reviewed three eBird hotspots within the Santa Clara River near the Study Area for recent detections of LBVI; *Santa Clara River – Santa Clarita* (located at the Santa Clara River/Castaic Junction confluence), *Iron Horse Trailhead (LA. Co.)* (located just east of I-5), and *Promenade Trailhead* (located near the Santa Clara River/San Francisquito Creek confluence) (The Cornell Lab of Ornithology 2023). one LBVI was reported at the *Santa Clara River – Santa Clarita* Hotspot on April 22, 2023, one reported at the *Iron Horse Trailhead (LA. Co.)* on June 20, 2023, and none were reported at the *Promenade Trailhead*.

5.2 Habitat Assessment

The Survey Area supported marginal habitat for LBVI that was not considered suitable to support a nesting pair of LBVI. The remnant patch of mulefat was disturbed, sparse, isolated, and lacked a diverse canopy structure.

No other riparian areas or potentially suitable habitat was present within the Study Area.

5.3 Focused Surveys

LBVI was not detected using the Survey Area, or areas immediately adjacent, during the 2023 protocol survey.

5.3.1 Other Regulatory-Status Species Detected

No federal and/or state listed Endangered, Threatened, or Candidate species were detected during the protocol survey. Two birds listed on the CDFW's Special Animals List[11] (California Department of Fish and Wildlife 2023) with a special status of CDFW Watch List[12] (WL) and no formal federal or state designation, were detected over the course of the eight surveys.

A list of the regulatory-status species detected is presented in *Table 2 – Regulatory-Status Species Detected* (Page 12).

[11] "Special Animals" is a broad term used to refer to all the animal taxa tracked by the CDFW CNDDB, regardless of their legal or protection status (California Department of Fish and Wildlife 2023).
[12] Watch list species are taxa that were previously SSCs [Species of Special Concern] but do not currently meet SSC criteria, and for which there is concern and a need for additional information to clarify status.

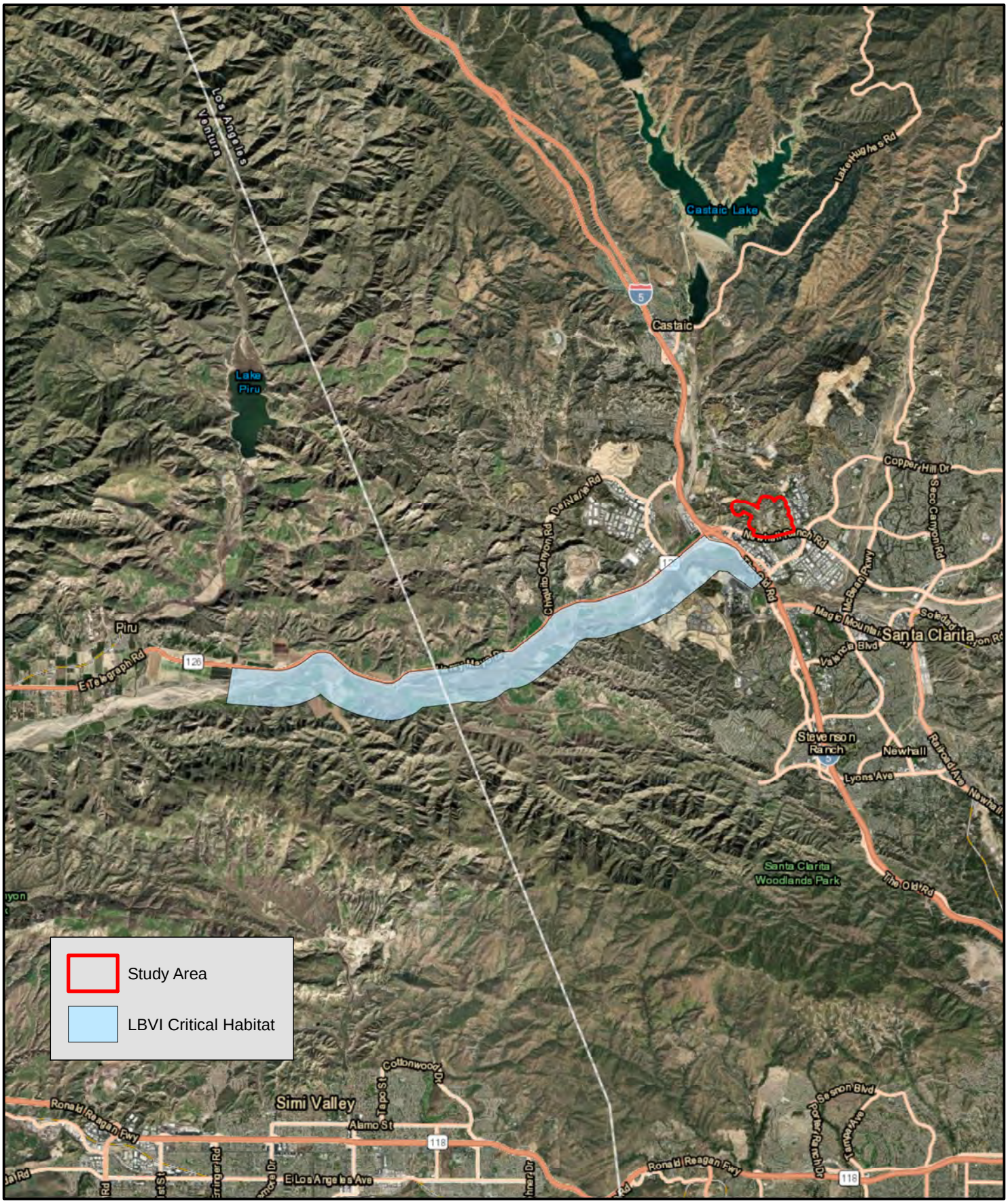

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FIGURE 5
Critical Habitat

DATE: September 7, 2023
COORDINATE SYSTEM: NAD 1983 State Plane California Zone V FIPS 0406 (feet)
SOURCE: ESRI World Imagery, ESRI World Transportation, SoCalGas, Caskey, USFWS ECOS

PROJECT:
Honor Rancho
Compressor Modernization
2023 LBVI Protocol Survey

Table 2 – Regulatory-Status Species Detected

SPECIES	REGULATORY STATUS	DETECTION DETAILS
Lawrence's Goldfinch (*Spinus lawrencei*) (LAGO)	CDFW Special Animal - Nesting (No formal CDFW status designation)	LAGO was observed foraging in and near the Survey Area during the first three protocol surveys. Nesting was not observed.
Southern California Rufous-crowned Sparrow (*Aimophila ruficeps canescens*) (RCSP)	CDFW – WL	RCSP was detected south of the Survey Area during protocol surveys 3 through 8. Nesting was suspected in the small hills south of the Survey Area.

6.0 CONCLUSIONS

LBVI was not detected during the 2022 or 2023 protocol surveys. As suspected, LBVI do not use the marginal habitat as a breeding territory. This notwithstanding, the April 12, 2022 incidental detection indicates that LBVI may utilize the marginal habitat as a stopover during migration, particularly during inclement weather. Due to the negative protocol survey results, SBS recommends that no additional protocol surveys be required for a duration of five years. However, due to the migrant LBVI detection, SBS recommends the following LBVI avoidance and minimization measures if the proposed project commences ground disturbance/grading operations in the next five years.

1. If grading is proposed to occur within 300-feet of the Survey Area from March 15 to August 31, a pre-construction survey shall be conducted for LBVI within three days of the proposed Project activities.
2. If the pre-construction survey results in the detection of LBVI, then at least three presence/absence surveys shall be conducted per the LBVI Survey Protocol prior to the Project commencing activities within 300-feet of the Survey Area.

7.0 REFERENCES

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8.0 CERTIFICATION

I hereby certify that the statements furnished above, the associated figures, and the attached appendices present data and information required for this biological evaluation, and that the facts, statements, and information presented are true and correct based on my professional experience and opinion.

Signed: Tim Searl Date: September 12, 2023

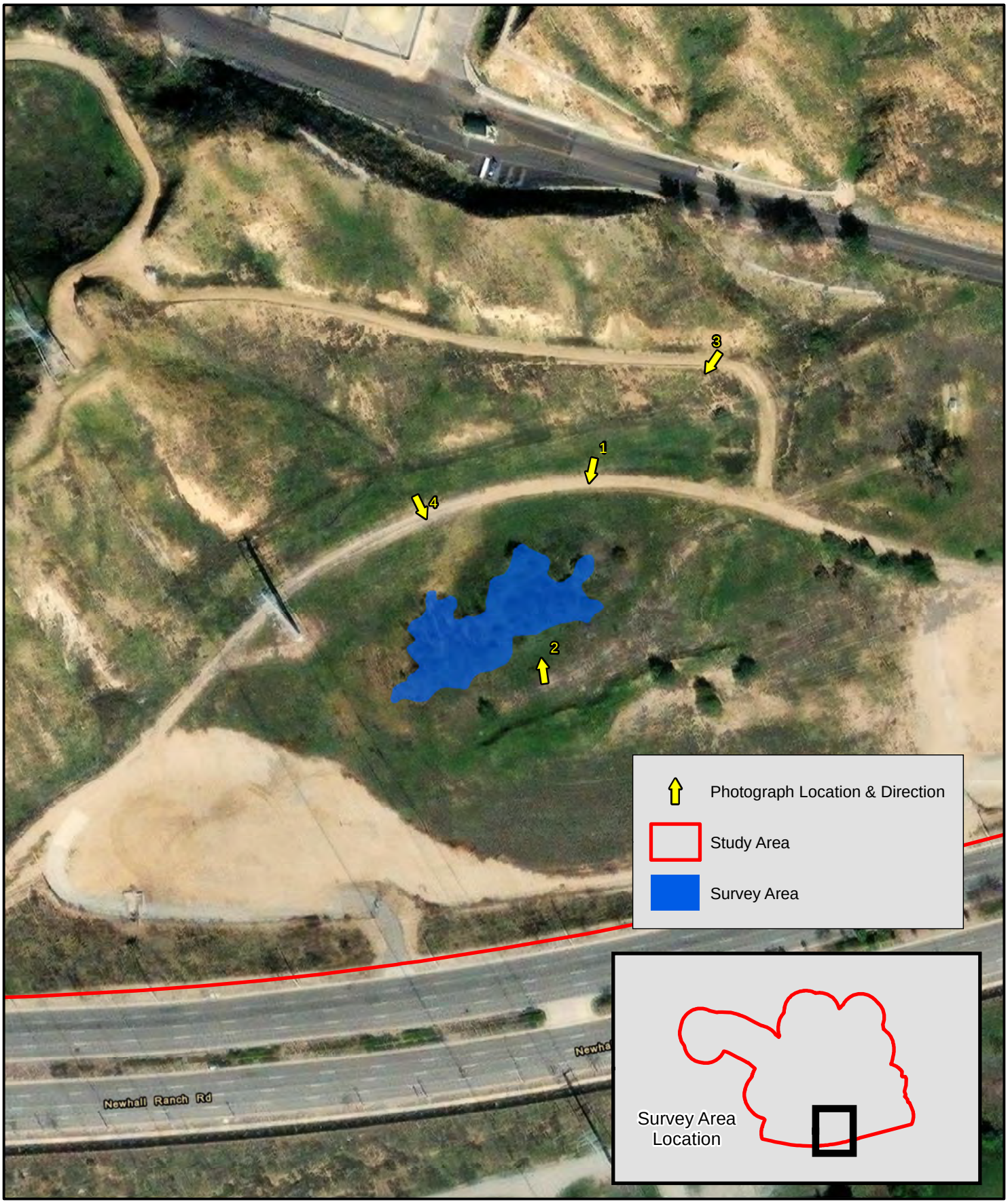
Tim Searl, Biologist, Searl Biological Services
USFWS Native E&T Recovery Permit Number: ES02351A
CDFW SCP/MOU Number: SC-183620001

FIGURE DISCLAIMER

Figures and data are to be used for reference purposes only. Map features are approximate and are not necessarily accurate to surveying or engineering standards. Tim Searl, SBS makes no warranty or guarantee as to the content (the source is often third party), accuracy, timeliness, or completeness of any of the data provided, and assumes no legal responsibility for the information contained on any of the Figures associated with this report.

APPENDIX A

Assessment Photographs



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N

0 75 150 225 300 Feet

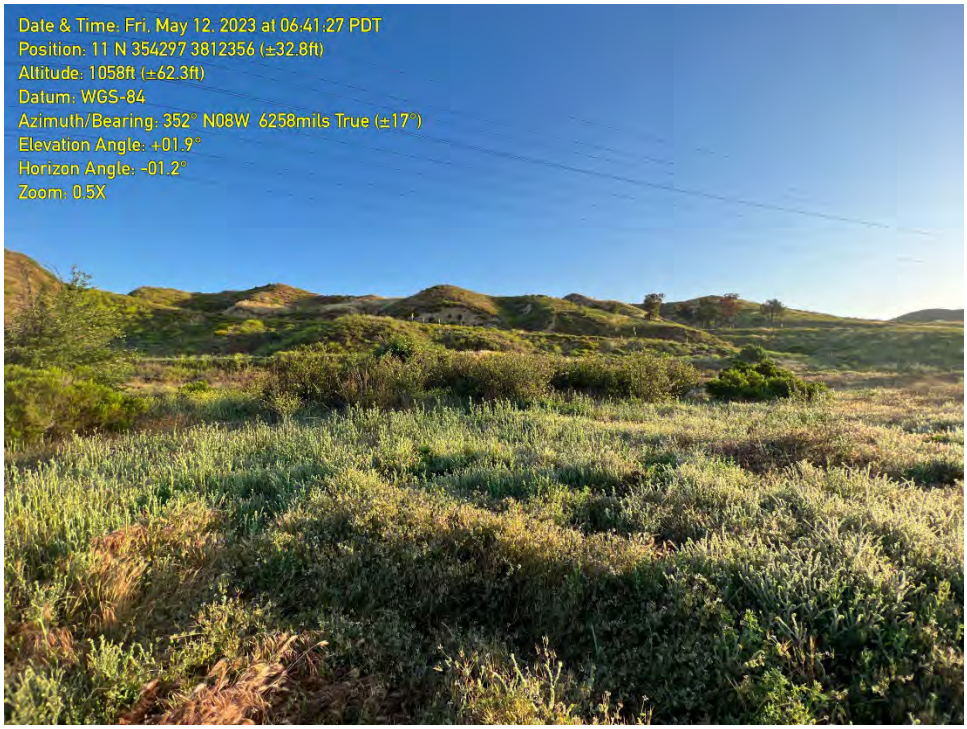
1 inch = 125 feet

APPENDIX A
Assessment Photographs Key Map

DATE: September 8, 2023
COORDINATE SYSTEM: NAD 1983 State Plane California Zone V FIPS 0406 (feet)
SOURCE: ESRI World Imagery, ESRI World Transportation, SoCalGas, Caskey, SBS

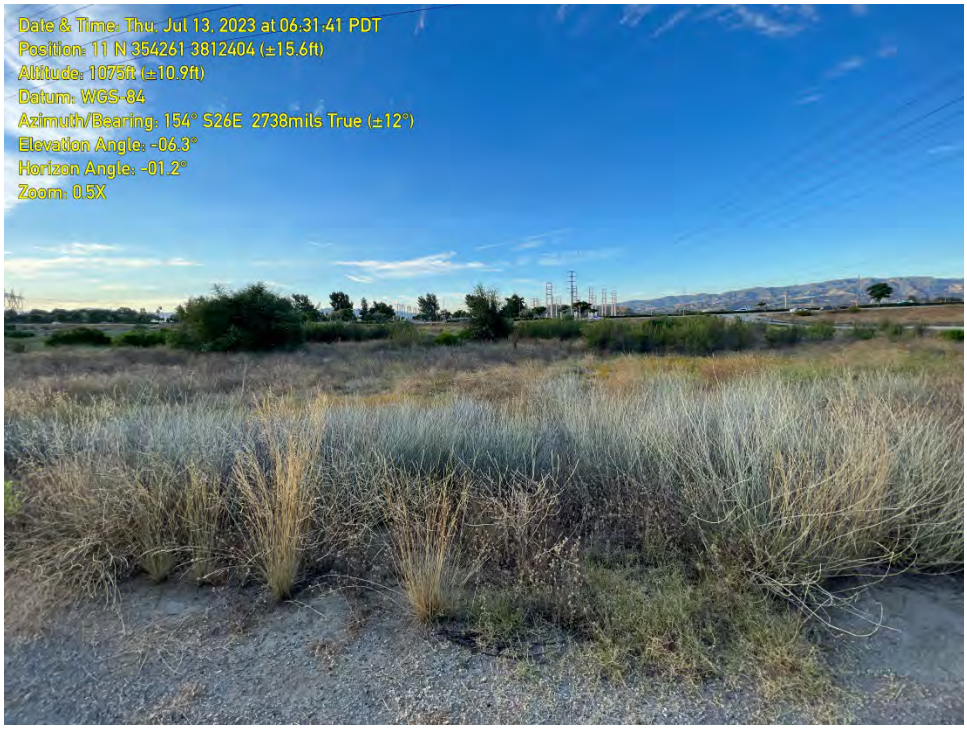
PROJECT:
Honor Rancho
Compressor Modernization
2023 LBVI Protocol Survey

PHOTOGRAPH 1: A southwesterly view of the Survey Area.



PHOTOGRAPH 2: The southern end of the Survey Area.

PHOTOGRAPH 3: An overhead view depicting the entire Survey Area.



PHOTOGRAPH 4: A late-season photograph of the Survey Area.

APPENDIX B

Wildlife Observed

Birds

The bird species listed below were detected visually or aurally either on, above, or near the Study Area during a LBVI protocol survey in 2023. The list below is presented in alphabetic order. Nomenclature for the Family (i.e., Icteridae), Common Name, and Scientific Name follow the American Ornithological Society *Checklist of North and Middle American Birds*. Introduced species are indicated with an (I).

COMMON NAME	SCIENTIFIC NAME
Blackbirds	**Icteridae**
Bullock's Oriole	*Icterus bullockii*
Hooded Oriole	*Icterus cucullatus*
Caracaras and Falcons	**Falconidae**
American Kestrel	*Falco sparverius*
Cardinals and Allies	**Cardinalidae**
Western Tanager	*Piranga ludoviciana*
Crows and Jays	**Corvidae**
American Crow	*Corvus brachyrhynchos*
California Scrub-Jay	*Aphelocoma californica*
Common Raven	*Corvus corax*
Ducks, Geese, and Swans	**Anatidae**
Canada Goose	*Branta canadensis*
Fringilline and Cardueline Finches and Allies	**Fringillidae**
House Finch	*Haemorhous mexicanus*
Lawrence's Goldfinch	*Spinus lawrencei*
Lesser Goldfinch	*Spinus psaltria*
Hawks, Kites, Eagles, and Allies	**Accipitridae**
Red-tailed Hawk	*Buteo jamaicensis*
Hummingbirds	**Trochilidae**
Anna's Hummingbird	*Calypte anna*
Costa's Hummingbird	*Calypte costae*
Mockingbirds and Thrashers	**Mimidae**
California Thrasher	*Toxostoma redivivum*
Northern Mockingbird	*Mimus polyglottos*
New World Quail	**Odontophoridae**
California Quail	*Callipepla californica*
New World Sparrows	**Passerellidae**
California Towhee	*Melozone crissalis*
Southern California Rufous-crowned Sparrow	*Aimophila ruficeps canescens*
White-crowned Sparrow	*Zonotrichia leucophrys*
Pigeons and Doves	**Columbidae**
Mourning Dove	*Zenaida macroura*
Rock Pigeon (I)	*Columba livia*
Starlings	**Sturnidae**
European Starling (I)	*Sturnus vulgaris*
Swallows	**Hirundinidae**
Barn Swallow	*Hirundo rustica*
Cliff Swallow	*Petrochelidon pyrrhonota*
Northern Rough-winged Swallow	*Stelgidopteryx serripennis*

COMMON NAME	SCIENTIFIC NAME
Swifts	**Apodidae**
White-throated Swift	*Aeronautes saxatalis*
Tyrant Flycatchers	**Tyrannidae**
Ash-throated Flycatcher	*Myiarchus cinerascens*
Black Phoebe	*Sayornis nigricans*
Cassin's Kingbird	*Tyrannus vociferans*
Say's Phoebe	*Sayornis saya*
Western Kingbird	*Tyrannus verticalis*
Wagtails and Pipits	**Motacillidae**
American Pipit	*Anthus rubescens*
Woodpeckers and Allies	**Picidae**
Acorn Woodpecker	*Melanerpes formicivorus*
Wood-Warblers	**Parulidae**
Yellow-rumped Warbler	*Setophaga coronata*
Wrens	**Troglodytidae**
Bewick's Wren	*Thryomanes bewickii*

Mammals

The mammals listed below were observed on or near the Study Area through sign and/or physical sightings during a LBVI protocol survey in 2023. The list below is presented in alphabetic order. Nomenclature for the Family (i.e., Felidae), Common Name, and Scientific Name follow *Wilson & Reeder's Mammal Species of the World*.

COMMON NAME	SCIENTIFIC NAME
Cats	**Felidae**
bobcat	*Lynx rufus*
Coyotes, Dogs, Foxes, Jackals, and Wolves	**Canidae**
coyote	*Canis latrans*
Deer	**Cervidae**
mule deer	*Odocoileus hemionus*
Pocket Gophers	**Geomyidae**
Botta's pocket gopher	*Thomomys bottae*

Herpetofauna

The herpetofauna listed below were detected during a LBVI protocol survey in 2023. The list below is presented in alphabetic order. Nomenclature for the Family (i.e., Phrynosomatidae), Common Name, and Scientific Name follow the Society for the Study of Amphibian and Reptiles (SSAR) *Standard English and Scientific Names*.

COMMON NAME	SCIENTIFIC NAME
Zebra-tailed, Earless, Fringe-toed, Spiny, Tree, Side-blotched, and Horned Lizards	**Phrynosomatidae**
Western Side-blotched Lizard	*Uta stansburiana elegans*

Appendix G: Western Spadefoot Survey Results

DUDEK
27271 LAS RAMBLAS, SUITE 340
MISSION VIEJO, CALIFORNIA 92691
T 949.450.2525

MEMORANDUM

To:	Kyle Weichert, Environmental Project Manager
From:	Max Murray, Biologist, Dudek
Subject:	Honor Rancho Compressor Modernization Project-Western Spadefoot Focused Survey Report
Date:	April 10, 2024
cc:	Kristin Starbird, Sr. Project Manager; Nicolo Di Jerlando, Environmental Compliance Specialist; Michael Cady, Senior Biologist
Attachments:	A – Study Area and Vicinity B – Study Area and Suitable Breeding Habitat C – Photo Exhibit D – Species Compendia

This memorandum (memo) documents the results of a focused western spadefoot (*Spea hammondii*) survey conducted in support of the SoCalGas Honor Rancho Compressor Modernization Project (Project). The purpose of this survey is to determine presence/absence of western spadefoot on the Project site and a 500-foot buffer ("study area"), as shown in Attachment A, Study Area and Vicinity. Dudek understands that the purpose of this Project is to modernize the gas compressors, natural gas injections wells and other supporting infrastructure.

1 Project Location

The Project is in the northern portion of Los Angeles County, north of the Santa Clara River and east of Interstate-5 (Attachment A). The Project site is located within the city limits of Santa Clarita and within the Newhall United States Geological Survey 7.5-minute topographic quadrangle. The elevation on the Project site ranges between 1,075 and 1,275 feet above mean seal level (msl).

2 Environmental Setting

The Project is adjacent to urban and developed areas of Santa Clarita as well as undeveloped open spaces. The study area, which is located within the southeastern side of the Honor Rancho facility, contains developed and disturbed areas associated with the facilities, as well as areas of native and nonnative vegetation (Attachment A).

3 Methods

Dudek biologists, Max Murray and Ryan Stanley, conducted a western spadefoot survey that consisted of an initial habitat assessment, nocturnal surveys, and potential diurnal breeding site inspections. Survey methods included standard diurnal and nocturnal amphibian visual encounter surveys modified from Fisher et al. 2004 and USFWS

1999 to suit the onsite conditions. As shown in Table 1, Survey Conditions, the initial habitat assessment was conducted on March 1, 2024, with the biologists walking the study area and scanning the areas inaccessible areas with binoculars. During the habitat assessment, biologists mapped all suitable breeding habitat within the study area. The nocturnal surveys were conducted on March 4 and 6, 2024. Nocturnal surveys were planned to coincide or closely follow significant rain events where 0.2 inches or more accumulated rainfall occurs within a 24-hour period. Diurnal breeding site inspection surveys were conducted on March 13 and 27, 2024.

Table 1. Survey Conditions

Date	Survey Conditions	Accumulated Rain Total (in.)	Surveyors
3/1/2024	Air temperature: 50-57°F Water temperature: 61°F Cloud cover: 90% Wind speed: 0-12 mph	0.0	Max Murray, Ryan Stanley
3/4/2024	Air temperature: 50-67°F Water temperature: 67-68°F Cloud cover: 30% Wind speed: 0-5 mph	0.0	Max Murray, Ryan Stanley
3/6/2024	Air temperature: 48-50°F Water temperature: 55-57°F Cloud cover: 10-100% Wind speed: 0-5 mph	0.51	Max Murray, Ryan Stanley
3/13/2024	Air temperature: 62-64°F Water temperature: 68°F Cloud cover: 30-40% Wind speed: 10-20 mph	0.0	Max Murray
3/27/2024	Air temperature: 65-70°F Water temperature: 70°F Cloud cover: 10-30% Wind speed: 2-8 mph	0.0	Max Murray

Note: Accumulated rain totals total rain over a 24-hour period.

4 Results

No western spadefoot were observed within the study area during the surveys. Suitable upland habitat was observed throughout the study area, with several suitable breeding pools mapped in the southern and northern portions of the study area (Attachment B). Suitable breeding habitat within the study area ranged from small, ponded sections in drainages (P004, P009, and P010) to larger storm water basins (P006, P007, and P008) as shown in Attachment B, Study Area and Suitable Breeding Habitat, and depicted in Attachment C, Photo Exhibit. Significant rain events occurred on March 2, 6, and 23, and coincided with the survey period. Other species of amphibians were active during the surveys with California toads (*Anaxyrus boreas halophilus*) and Baja California treefrogs (*Pseudacris hypochondriaca hypochondriaca*) being the most common species. Egg masses, larvae, and

adults of both species were observed throughout the study area (Attachment C). A total of 30 wildlife species were observed during the surveys, with 28 being common native species. All species observed were recorded and can be found in Attachment D, Species Compendia.

5 Conclusion

Due to lack of western spadefoot observed during these surveys, neither direct nor indirect impacts to western spadefoot are expected to occur because of Project activities. Although surveys started after the first and most significant rain events of the 2024 wet-season, the surveys were conducted within a close enough time to these early storm events to detect western spadefoot egg masses, larvae, or juveniles if present within the study area.

6 References

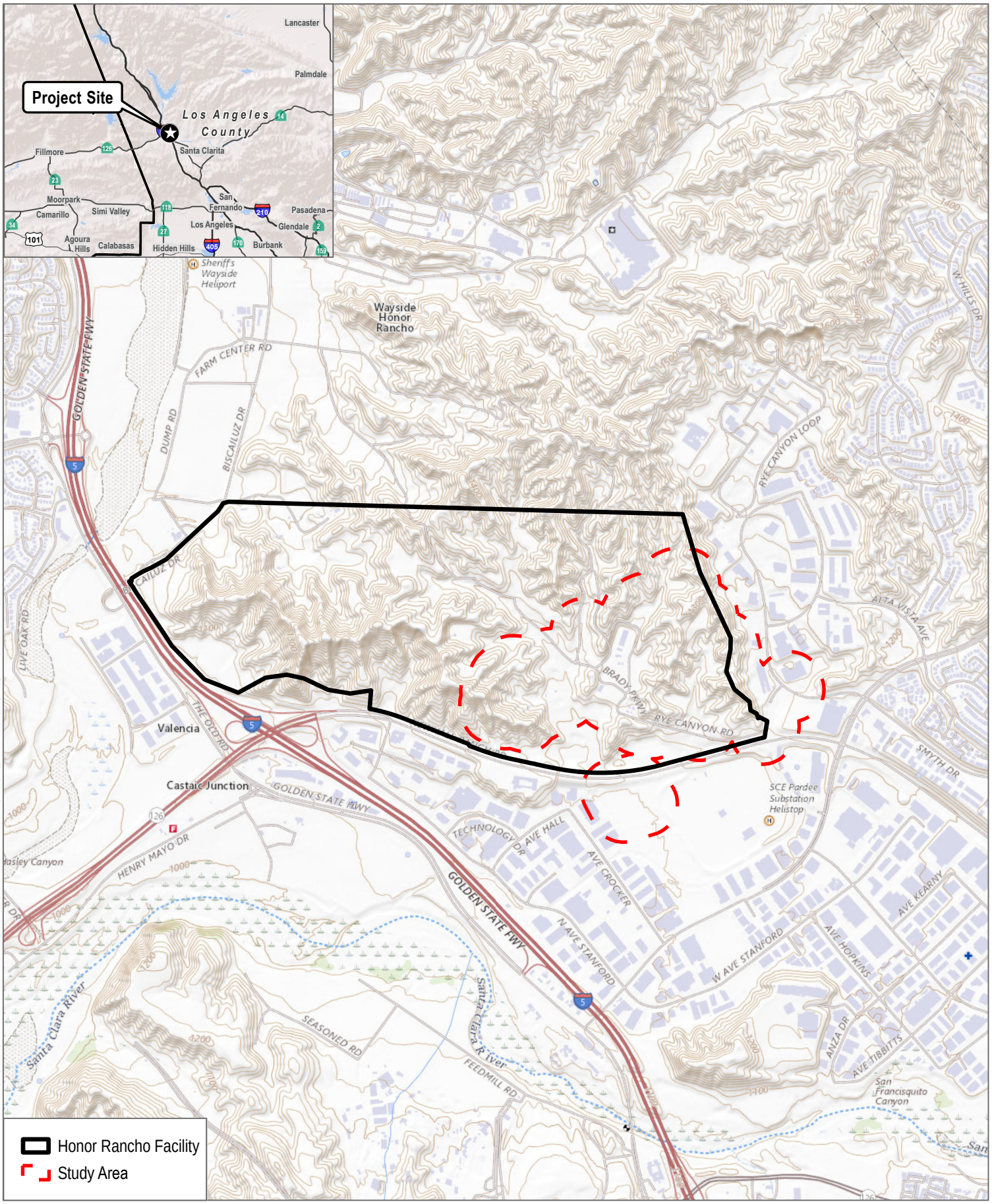
Fisher, R. N., P. C. Trenham, S. L. Compton, A. R. Backlin, S. A. Hathaway, and T. A. Touré. 2004. Habitat assessment and baseline surveys for the western spadefoot (*Spea hammondii*) and the western pond turtle (*Emys marmorata*) on the Irvine Ranch Land Reserve. U. S. Geological Survey technical report. 50 pp.

United States Fish and Wildlife Service. 1999. Survey Protocol for the Arroyo Toad.

Los Angeles County Department of Public Works. 2024. Near Real-Time Precipitation Map. Castaic Junction. Accessed March 2024. https://dpw.lacounty.gov/wrd/rainfall/

Attachment A

Study Area and Vicinity



SOURCE: USGS National Map 2024

DUDEK

0 500 1,000 Feet

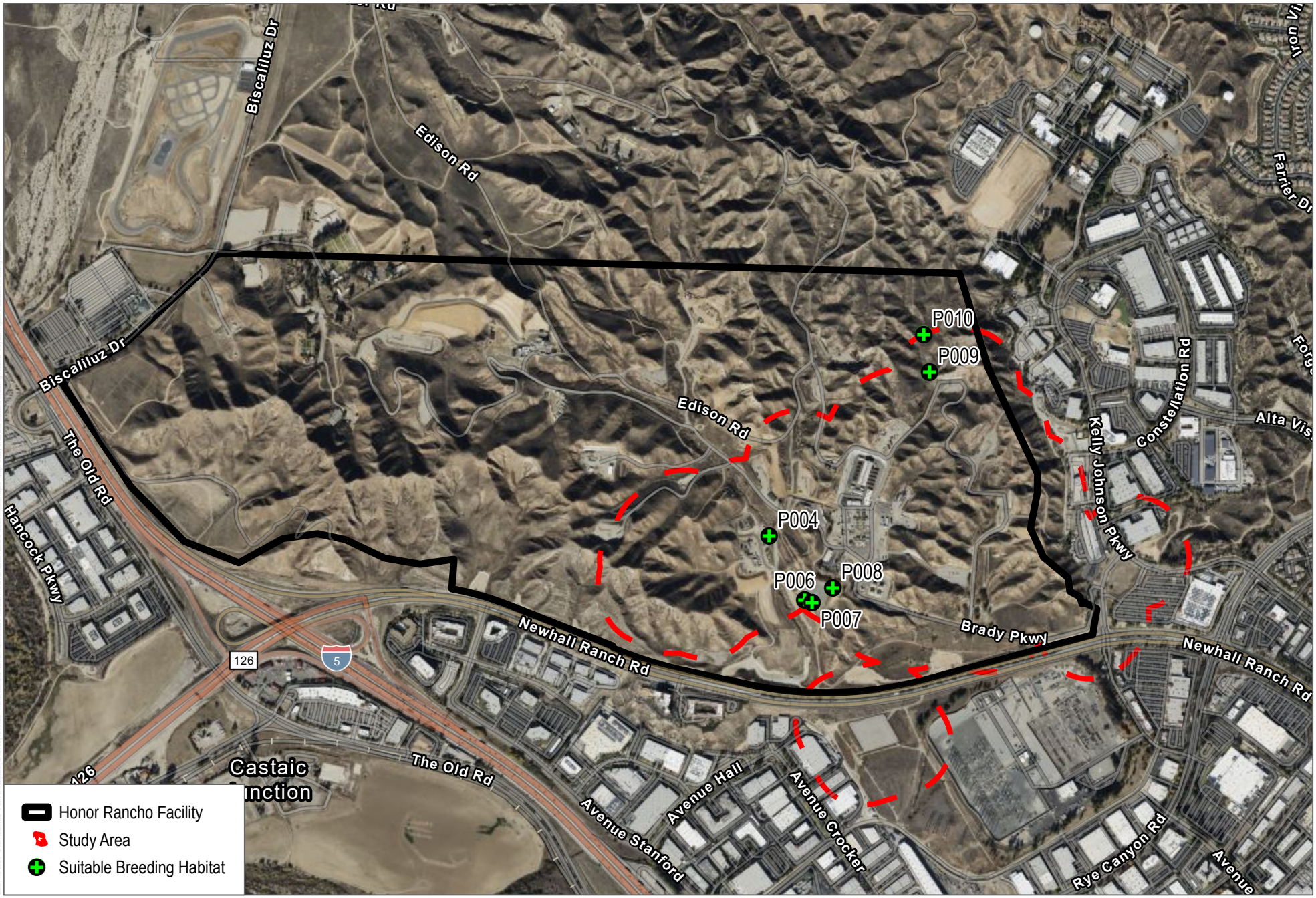
FIGURE 1

Study Area and Vicinity

Honor Rancho Western Spadefoot Survey

Attachment B

Study Area and Suitable Breeding Habitat



SOURCE: Bing 2024

DUDEK

0 500 1,000 Feet

FIGURE 2

Study Area and Suitable Breeding Habitat

Honor Rancho Western Spadefoot Survey

Attachment C

Photo Exhibit

Photo 1. Breeding pool P004 taken from downstream taken on 3/1/2024

Photo 2. Breeding pool P004 taken from downstream taken on 3/27/2024

Photo 3. Breeding pool P006 and P007 taken on 3/6/2024

Photo 4. Breeding pool P008 from the north taken on 3/1/2024

Photo 5. Breeding pool P009 from downstream taken on 3/27/2024

Photo 6. Breeding pool P010 taken on 3/1/2024

Photo 7. Baja California treefrog egg masses in breeding pool P007.

Photo 8. Western toad egg masses in breeding pool P006.

Photo 9 Western toad in breeding pool P006.

Photo 10. Baja California treefrog larvae and hatched egg mass in breeding pool P007.

Photo 11. Baja California treefrog upland of breeding pool P008.

Photo 12. Desiccated egg mass near P007.

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Attachment D

Species Compendia

Vascular Species

Eudicots

ASTERACEAE – SUNFLOWER FAMILY

Artemisia californica – California sagebrush
Baccharis pilularis – coyote brush
Baccharis salicifolia – mulefat
Encelia farinosa – brittle bush

BORAGINACEAE – BORAGE FAMILY

Amsinckia menziesii – Menzies' fiddleneck

BRASSICACEAE – MUSTARD FAMILY

* *Brassica nigra* – black mustard

CACTACEAE – CACTUS FAMILY

Opuntia basilaris – beavertail pricklypear

CHENOPODIACEAE – GOOSEFOOT FAMILY

* *Salsola tragus* – prickly Russian thistle

CUCURBITACEAE – GOURD FAMILY

Cucurbita palmata – coyote gourd

FABACEAE – LEGUME FAMILY

Acmispon glaber – deer weed

FAGACEAE – OAK FAMILY

Quercus berberidifolia – Inland scrub oak
Quercus lobata – valley oak

LAMIACEAE – MINT FAMILY

Salvia apiana – white sage
Salvia leucophylla – purple sage
Salvia mellifera – black sage

MALVACEAE – MALLOW FAMILY

* *Malva parviflora* – cheeseweed mallow

POLYGONACEAE – BUCKWHEAT FAMILY

Eriogonum fasciculatum – California buckwheat

RHAMNACEAE – BUCKTHORN FAMILY

Ceanothus cuneatus – wedge leaf ceanothus, buck brush

ROSACEAE – ROSE FAMILY

Adenostoma fasciculatum – chamise

Heteromeles arbutifolia – toyon

SOLANACEAE – NIGHTSHADE FAMILY

* *Nicotiana glauca* – tree tobacco

VIBURNACEAE – MUSKROOT FAMILY

Sambucus mexicana – blue elderberry

Monocots

AGAVACEAE – AGAVE FAMILY

Hesperoyucca whipplei – chaparral yucca

POACEAE – GRASS FAMILY

* *Avena barbata* – slender oat
* *Bromus madritensis* – compact brome
* *Schismus barbatus* – common Mediterranean grass

THEMIDACEAE – BRODIAEA FAMILY

Dipterostemon capitatus – bluedicks

Wildlife Species

Amphibians

Frogs

HYLIDAE – TREEFROGS

Pseudacris hypochondriaca hypochondriaca – Baja California treefrog

Toads

BUFONIDAE – TRUE TOADS

Anaxyrus boreas halophilus– California toad

Birds

Blackbirds, Orioles and Allies

ICTERIDAE – BLACKBIRDS

Sturnella neglecta – western meadowlark

Bushtits

AEGITHALIDAE – LONG-TAILED TITS AND BUSHTITS

Psaltriparus minimus – bushtit

Falcons

FALCONIDAE – CARACARAS AND FALCONS

Falco sparverius – American kestrel

Finches

FRINGILLIDAE – FRINGILLINE AND CARDUELINE FINCHES AND ALLIES

Haemorhous mexicanus – house finch

Spinus psaltria – lesser goldfinch

Flycatchers

TYRANNIDAE – TYRANT FLYCATCHERS

Sayornis nigricans – black phoebe

Sayornis saya – Say's phoebe

Tyrannus vociferans – Cassin's kingbird

Hawks

ACCIPITRIDAE – HAWKS, KITES, EAGLES, AND ALLIES

Buteo jamaicensis – red-tailed hawk

Jays, Magpies and Crows

CORVIDAE – CROWS AND JAYS

Aphelocoma californica – California scrub-jay

Corvus corax – common raven

Mockingbirds and Thrashers

MIMIDAE – MOCKINGBIRDS AND THRASHERS

Mimus polyglottos – northern mockingbird

Toxostoma redivivum – California thrasher

New World Vultures

CATHARTIDAE – NEW WORLD VULTURES

Cathartes aura – turkey vulture

Old World Warblers and Gnatcatchers

POLIOPTILIDAE – GNATCATCHERS

Polioptila caerulea – blue-gray gnatcatcher

Owls

STRIGIDAE – TYPICAL OWLS

Bubo virginianus – great horned owl

Pigeons and Doves

COLUMBIDAE – PIGEONS AND DOVES

* *Columba livia* – rock pigeon (rock dove)

Starlings and Allies

STURNIDAE – STARLINGS

* *Sturnus vulgaris* – European starling

Thrushes

TURDIDAE – THRUSHES

Sialia mexicana – western bluebird

Wood Warblers and Allies

PARULIDAE – WOOD-WARBLERS

Setophaga coronata – yellow-rumped warbler

Woodpeckers

PICIDAE – WOODPECKERS AND ALLIES

Colaptes auratus – northern flicker

Wrens

TROGLODYTIDAE – WRENS

Thryomanes bewickii – Bewick's wren

New World Sparrows

PASSERELLIDAE – NEW WORLD SPARROWS

Melozone crissalis – California towhee

Zonotrichia leucophrys – white-crowned sparrow

Mammals

Ungulates

CERVIDAE – DEERS

Odocoileus hemionus – mule deer

Rats, Mice, and Voles

CRICETIDAE – RATS, MICE, AND VOLES

Peromyscus californicus – California deermouse

Reptiles

Lizards

PHRYNOSOMATIDAE – IGUANID LIZARDS

Sceloporus occidentalis – western fence lizard

Uta stansburiana – common side-blotched lizard

* signifies introduced (non-native) species