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BIOLOGICAL RESOURCES ASSESSMENT

Caelesta Winery Project

333 Lupine Lane, Templeton, California

APN: 033-201-010

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September 2019

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

Kristen Nelson

Signature line

20 September 2019

Date

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EXECUTIVE SUMMARY

This Biological Resources Assessment report (BRA) was prepared by Terra Verde Environmental Consulting, LLC (Terra Verde) at the request of Mr. Brian Farrell (owner) in support of the proposed Caelesta Winery Project. The proposed project is located approximately 2.5 miles east Highway 101 in the unincorporated community of Templeton in San Luis Obispo County, California (APN: 033-201-010). The proposed project includes a new winery and tasting room facility, with new primary and secondary access roads. The new facility will include a 2,360-square-foot (sf) hospitality building; 4,060-sf wine production facility; and 4,165 sf of outdoor use areas, as well as associated infrastructure and a paved parking lot. In addition, a new water tank will be installed on a hill located southeast of the proposed facility, with a new water supply line connecting the tank to the facility.

Terra Verde staff conducted a field survey of the proposed project site and surrounding areas on May 17, 2019. The survey area included the limits of proposed disturbance, an approximate 100-foot buffer on all sides where access was feasible, and a visual scan of the surrounding areas. In addition, a reconnaissance-level survey was completed by visual scan and a review of aerial imagery for the area surrounding the proposed new water tank. The surveys included an inventory of botanical and wildlife species observed, an analysis of jurisdictional aquatic resources identified on site, and an assessment of habitat, focusing on the potential for special-status species to occur. Two special-status botanical species were documented on site: Salinas milk-vetch (*Astragalus macrodon*) and South Coast Range morning-glory (*Calystegia collina* subsp. *venusta*). No special-status wildlife species were observed directly during the survey, but suitable habitat was identified for nine special-status wildlife species, as well as nesting birds.

In addition, individual oak trees and oak woodland habitat are present on site. Impacts to and/or removal of individual trees may be necessary during construction. One jurisdictional blue line drainage flows east across the site, immediately south of the proposed facility, and the water supply line will be installed underneath the drainage using horizontal directional drilling.

As currently designed, the potential for impacts to biological resources is considered low. Direct impacts to special-status botanical species could result if individual plants or portions of the seed bank are removed during construction or long-term operations of the proposed project. Direct impacts to special-status wildlife could result from construction-related disturbances such as trampling or crushing from equipment. A series of avoidance, minimization, and mitigation measures have been recommended to reduce potential impacts to a less than significant level.

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1.0 INTRODUCTION

This Biological Resources Assessment Report (BRA) was prepared by Terra Verde Environmental Consulting, LLC (Terra Verde) at the request of Mr. Brian Farrell (owner) in support of the proposed Caelesta Winery Project (project), located at 333 Lupine Lane in Templeton, California (see Appendix A - Figure 1: Project Vicinity Map). The proposed project includes the following components: a 2,360-square-foot (sf) hospitality building; 4,060-sf wine production facility; 4,165 sf of outdoor use areas; parking area with 9 spaces; and a new water supply line and water tank. The water tank will be located upslope of the new facility, within an existing vineyard and unpaved ranch road on a hill approximately 700 feet southeast of proposed new facilities. In addition, two new access roads will be constructed, which will provide paved primary access and unpaved secondary access to the new facility from El Pomar Drive.

Preliminary site plans have been prepared (see Appendix B: Preliminary Site Plans, dated 07-12-19), which place the new facility in an undeveloped field near the intersection of Lupine Lane and El Pomar Drive. The proposed project will include approximately two acres of disturbance within an annual grassland. The proposed water supply line is planned to be installed via horizontal directional drilling (HDD) from the water tank site, beneath a portion of existing vineyard, a large woodland slope area, and an existing ephemeral drainage feature, to the open field and proposed development site.

1.1 Purpose of the Biological Resources Assessment

The purpose of this BRA is to identify sensitive biological resources that occur or have potential to occur within the proposed project site and surrounding areas. A sensitive resource is defined here as one that is of management concern to local, county, state, and/or federal resource agencies. Recommended avoidance, minimization, and mitigation measures are included in Section 4.2, to reduce any potential impacts to sensitive biological resources to the extent feasible. As necessary, this BRA may be used to support future project permitting.

1.2 Existing Conditions

The proposed project is located within the Templeton U.S. Geological Survey (USGS) 7.5-minute topographic quadrangle. The project site is located approximately 2.5 miles east of the unincorporated community of Templeton and the Salinas River, in the Upper Salinas River Valley. The proposed project area is bordered by El Pomar Drive, Lupine Lane, and existing vineyards to the north and west, and an ephemeral USGS blue line drainage and oak woodland habitat to the south and east. The surrounding landscape consists of a mix of rural residences, vineyards, pastureland, and undeveloped parcels consisting of oak woodland and oak savannah habitats. Elevations on site range from approximately 275 to 348 meters (902 to 1,142 feet).

2.0 METHODOLOGY

Prior to conducting field surveys, Terra Verde staff completed a background review of relevant literature and resources pertaining to sensitive resources known to occur within the survey area (see Appendix A – Figure 2: Survey Area Map) and in the project vicinity, which included the following:

- Aerial photographs (Google Earth 1994-2018) and project site plans
- USGS topographic map of the Templeton, 7.5-minute quadrangle (USGS 2019)
- Online Soil Survey of San Luis Obispo County, California (Natural Resources Conservation Service 2019)
- Consortium of California Herbaria (CCH) online database of plant collections (CCH 2019)
- California Natural Diversity Database (CNDDB) list of special-status species documented within the Templeton 7.5-minute quadrangle, and the surrounding eight quadrangles (Adelaida, Atascadero, Creston, Estrella, Morro Bay North, Santa Margarita, Paso Robles and York Mountain), (California Department of Fish and Wildlife [CDFW] 2019a)
- CNDDB map of special-status species that have been documented within a 2-mile radius of the project site (CDFW 2019a) (see Appendix A – Figure 3: 2-mile CNDDB and Critical Habitat Map)
- California Native Plant Society (CNPS) Inventory of Rare and Endangered Plants for the Templeton 7.5-minute quadrangle and the surrounding eight quadrangles (CNPS 2019a)
- United States Fish and Wildlife Service (USFWS) Critical Habitat Portal (USFWS 2019a)
- USFWS National Wetland Inventory map (USFWS 2019b)

A list of regionally occurring special-status species was compiled based on records reported in the scientific database queries (see Appendix C – Regionally Occurring Special-Status Species). This list was used to focus the field survey effort as well as to determine an appropriate survey period for special-status botanical species with potential to occur on site.

Terra Verde biologist Sara Snyder and botanist Kristen Nelson conducted a field survey of the project site on May 17, 2019. A pedestrian survey was completed in the entire area of proposed disturbance (i.e., winery facility footprint, access roads and water line) and an approximate 100-foot buffer on all sides where access was feasible. In addition, a visual scan and reconnaissance-level survey was completed for the surrounding areas (see Appendix A – Figure 2). The visual scan included the area proposed for the new water tank, which is to be located within a disturbed staging/parking area adjacent to an existing vineyard. The survey was completed on foot and lasted approximately three hours. Surveys included an inventory of all botanical and wildlife species encountered, including those detected indirectly via sign (i.e., tracks, scat, skeletal remains, dens, burrows, or vocalizations) (see Appendix D - Botanical and Wildlife Species Observed). The survey also included identification of sensitive habitats, including suitable habitat for special-status botanical and wildlife species, an assessment of jurisdictional aquatic features, and classification of vegetation communities observed on site.

Botanical species identifications and taxonomic nomenclature followed *The Jepson Manual: Vascular Plants of California*, 2nd edition (Baldwin et al. 2012), as well as taxonomic updates provided in the Jepson eFlora (Jepson Flora Project 2019). Vegetation communities were characterized and classified using the second edition of *A Manual of California Vegetation* (MCV) classification system (Sawyer et al. 2009), as well as updates included in the MCV Online (CNPS 2019b). The habitat requirements for each regionally occurring, special-status species listed in Appendix C were analyzed and compared to the type and quality of habitats observed on site during the field surveys. Due to a lack of suitable habitat, elevation, lack of appropriate soils/substrate, and/or known distribution/range, it was determined that many regionally occurring special-status species have no potential to occur within the project site. Surveys included mapping the northern limit of the extent of agency jurisdiction associated with the ephemeral drainage, for the purpose of establishing setbacks.

2.1 Sufficiency of Biological Data

The field surveys and background research are of sufficient detail and biological expertise and were appropriately timed to coincide with the typical peak blooming and/or fruiting period for potentially occurring special-status botanical species, when plants are most identifiable. Visibility and conditions were suitable for the detection of common and special-status botanical and wildlife species during the field survey.

Migratory and transient wildlife species, such as many avian species and large mammals, may only be seasonally present within the project area. Further, some species are nocturnal, and/or highly transient and therefore may have not been detected during the survey effort. As such, recommendations have been made for the avoidance of special-status species deemed to have potential to occur, based on an assessment of habitat present at the site.

3.0 RESULTS

The following section provides a summary and analysis of the results of the background research and field surveys. The discussion includes a description of soils, terrestrial and aquatic habitat types, direct and indirect observations of wildlife and botanical species, and a discussion of the potential for special-status species to occur. Any anticipated impacts to existing wildlife corridors and habitat connectivity are also considered.

3.1 Habitats and Resources Observed

The survey area supports a mix of annual grassland and oak woodland habitats (see Appendix E – Representative Site Photographs). One ephemeral blue line drainage occurs within the survey area, which flows east along the southern edge of the proposed project. Two soil types and four vegetation communities were identified within the survey area, which are described in further detail below.

3.1.1 Soils

The NRCS online soil report revealed three soil units within the survey area (see Appendix A – Figure 4: Soils Map). The primary characteristics of these soil units are described below.

Soil Unit 152: Linne-Calodo complex, 9 to 30 percent slopes
The parent material of this soil type is residuum weathered from calcareous shale and/or sandstone. The drainage class of this unit is well drained, and it is composed mostly of channery clay loam over weathered bedrock. This soil type tends to occur on hills and slopes between 600 and 1,500 feet and is not considered prime farmland.

Soil Unit 154: Linne-Calodo complex, 50 to 75 percent slopes
The parent material of this soil type is residuum weathered from calcareous shale and/or sandstone. The drainage class of this unit is well drained, and it is composed mostly of channery clay loam over weathered bedrock. This soil type tends to occur on mountains and slopes between 500 and 2,500 feet and is not considered prime farmland.

Soil Unit 159: Lockwood-Concepcion complex, 2 to 9 percent slopes
The parent material of this soil type is alluvium derived from sedimentary rock. The drainage class of this unit is well drained, and it is composed mostly of channery loam over channery clay loam. This soil type tends to occur on terraces between 600 and 1,500 feet and is designated as farmland of statewide importance.

3.1.3 Hydrologic Features

As noted above, one USGS blue line drainage occurs within the survey area (see Appendix A – Figure 2). The proposed project has been designed so that all permanent structures are located at least 50 feet from the northern edge of the drainage. However, the water supply line for the facility, will be installed beneath the drainage feature via HDD methodology.

During the survey, this drainage was observed with a clearly defined bed and bank, including evidence of an ordinary high water mark. It flows east across the project site, eventually discharging to the Salinas River, approximately 2.25 miles to the west. As such, this drainage is assumed to fall under the jurisdiction of CDFW, the Central Coast Regional Water Quality Control Board (RWQCB), and the U.S. Army Corps of Engineers (Corps).

3.1.2 Vegetation Communities

Vegetation communities were assessed, classified, and mapped based on vegetation composition, structure, and density, with consideration of known land management practices (see Appendix A – Figure 5: Vegetation Communities and Sensitive Resources Map). The survey area totaled approximately 18.3 acres. Approximately 11.5 acres of the survey area consists of grassland habitat, and the remaining 5.5 acres includes a mix of blue oak (*Quercus douglasii*), coast live oak (*Quercus agrifolia*), and valley oak (*Quercus lobata*) woodlands. The remaining acreage encompasses an existing vineyard and associated staging areas and access roads. The composition of natural habitats observed on site is described in further detail below.

Wild Oats Grasslands (11.5 acres)

Flat portions of the survey area located north and northwest of the drainage feature support annual grassland habitat. This community is dominated by slender wild oat (*Avena barbata*) and rattail sixweeks grass (*Festuca myuros*), with ripgut grass (*Bromus diandrus*), sky lupine (*Lupinus nanus*), miniature lupine (*Lupinus bicolor*), and valley popcornflower (*Plagiobothrys canescens*) occurring commonly throughout. A few isolated valley oak trees (*Quercus lobata*) were observed within this part of the site. South Coast Range morning-glory (*Calystegia collina* subsp. *venusta*), a special-status species with a California Rare Plant Rank (CRPR) of 4.3, was observed in an isolated patch at the southern edge of this community (see Appendix A – Figure 5).

This species composition was used in determining the community classification, which most closely corresponds with the *Avena* (*barbata, fatua*) Semi-Natural Herbaceous Stands (wild oats grasslands) in the MCV classification system. Typically, wild oats grasslands occur in foothills, waste places, rangelands, and openings in woodlands at elevations below 1,200 meters. This community may provide habitat for nesting birds, small mammals, and other wildlife.

Blue Oak Woodland (4.8 acres)

The sloped portions of the site support blue oak woodland. Blue oak trees form the dominant overstory cover, with holly-leafed cherry (*Prunus ilicifolia*), big berry manzanita (*Arctostaphylos glauca*), coast live oak (*Quercus agrifolia)*, and valley oak occurring at variable cover. The understory is mostly open and grassy, dominated by ripgut grass. Salinas milk-vetch (*Astragalus macrodon*), a special-status species with a CRPR listing of 4.3, was observed in association with this community, near the southeastern edge of the survey area (see Appendix A – Figure 5).

This species composition was used in determining the community classification, which most closely corresponds with the *Quercus douglasii* Woodland Alliance (blue oak woodland) in the MCV classification system. This community typically occurs in valley bottoms, foothills, and on rocky outcrops, and provides high suitability habitat for various common and special-status wildlife species.

Coast Live Oak Woodland (0.83 acre)

A patch of coast live oak-dominated woodland was observed in association within a portion the blue line drainage. The tree canopy is dominated by coast live oak, with blue oak and valley oak co-occurring. The understory is a mix of woody vines and grasses, including creeping snowberry (*Symphoricarpos mollis*), honeysuckle (*Lonicera* sp.), western poison oak (*Toxicodendron diversilobum*), and ripgut grass.

This species composition was used in determining the community classification, which most closely corresponds with the *Quercus agrifolia* Woodland Alliance (coast live oak woodland) in the MCV classification system. This community typically occurs on alluvial terraces, canyon

bottoms, stream banks, slopes, and flats at elevations below 1,200 meters, and provides suitable habitat for various common and special-status wildlife species.

Valley Oak Woodland (0.25 acre)

A small patch of valley oak woodland is present along the drainage in the southwestern corner of the survey area. This patch extends into adjacent areas, outside the survey area. The community consists of valley oaks, with an understory of mostly non-native annual grasses. Additional, isolated valley oak trees are present in the grassland habitat on site (see Appendix A – Figure 5). These isolated trees are large, mature individuals and may qualify as heritage oaks.

This species composition was used in determining the community classification, which most closely corresponds with the *Quercus lobata* Woodland Alliance (valley oak woodland) in the MCV classification system. In addition, this community composition corresponds to the description for the CDFW definition of valley oak woodland, a sensitive natural community. This habitat provides suitable habitat for various common and special-status wildlife species.

3.1.4 Wildlife

The terrestrial habitat observed within and adjacent to the survey area is suitable for a variety of common and some special-status wildlife species. In particular, oak woodlands provide suitable nesting opportunity for a variety of raptors and other bird species. Grassland habitat observed within and adjacent to the survey area may also provide suitable nesting habitat for ground-nesting birds, as well as suitable habitat for burrowing mammals.

Wildlife observed on site included red-tailed hawk (*Buteo jamaicensis*), California ground squirrel (*Otospermophilus beecheyi*), and Botta's pocket gopher (*Thomomys bottae)*. Common wildlife such as racoon (*Procyon lotor)*, coyote (*Canis latrans)*, mule deer (*Odocoileus hemionus*), and additional bird species can be expected to occur throughout the year and/or seasonally. See Appendix D for a complete list of wildlife species observed on site.

3.2 Sensitive Resources

Based on the results of the background research, it was determined that 2 sensitive natural communities, 61 special-status botanical species, and 35 special-status wildlife species are known to occur in the project region. The habitat requirements for each of these species were compared to the type and quality of habitat documented during the field survey. Following this assessment, it was determined that suitable habitat is present on site for 14 of the regionally occurring special-status botanical species and 9 of the regionally occurring special-status wildlife species. The following section includes a discussion of sensitive biological resources that were observed or determined to have potential to occur on site; those determined to have no potential to occur are not discussed any further.

3.2.1 Special-status Botanical Species

Based on a review of the relevant literature and an assessment of site conditions, it was determined that 14 special-status botanical species have potential to occur on the project site, based on presence of suitable habitat. In addition to species listed on the federal and California Endangered Species Acts, special-status botanical species include those that are included on the CRPR list by the California Native Plant Society. CRPR species are assigned a listing status based on the degree of rarity (Lists 1A through 4) and threat level (0.1, 0.2, and 0.3) (CNPS 2019c). Additionally, individual oak trees (*Quercus* spp.) and oak woodland habitat are considered a sensitive resource by the State of California and the County of San Luis Obispo.

Two special-status species were documented on site: Salinas Milk-vetch and South Coast Range morning-glory (see Appendix F – California Native Species Field Survey Forms). The following paragraphs provide a description for all the special-status botanical species for which suitable habitat was identified on site. However, the May survey was completed during the typical blooming period for regionally occurring special-status plant species, and no additional rare plant species are expected to be present or impacted as a result of the proposed project.

Douglas' fiddleneck *(Amsinckia douglasiana),* CRPR 4.2
Douglas' fiddleneck is an annual herb that is endemic to the coastal ranges of central California. This species typically occurs in sedimentary shale soils in association with various grassland and woodland communities. It has been documented at elevations ranging from 100 to 1,600 meters and may tolerate moderate levels of disturbance. The typical blooming period is from March to June (Jepson Flora Project 2019). Documented threats to this species include agriculture (CNPS 2019a). According to CCH records (2019), the nearest documented occurrence is approximately 7.2 miles north of the project site.

Bishop manzanita *(Arctostaphylos obispoensis),* CRPR 4.3
Bishop manzanita is a shrub up to 4 meters tall that occurs along the Outer South Coast Ranges from southern Monterey County to northern Santa Barbara County. This species typically occurs in serpentine soils in association with chaparral and open coniferous forest near the coast. It is known to occur at elevations ranging from 60 to 950 meters. The typical blooming period for this species may span from February to March (Jepson Flora Project 2019). According to CCH records (2019), the nearest documented occurrence of this species is approximately 7.9 miles southwest of the project site.

Salinas milk-vetch *(Astragalus macrodon),* CRPR 4.3
Salinas milk-vetch is a perennial herb that is endemic to the Inner South Coast Ranges of California. This species typically grows in eroded shale or sandstone soils or serpentine alluvium in association with various vegetation communities including grassland, chaparral, and woodland. It is known to occur at elevations ranging from 200 to 1,550 meters and may tolerate some disturbance. The typical blooming period for Salinas milk-vetch is from April to June (Jepson Flora Project 2019). According to CCH (2019) records, the nearest occurrence is approximately 0.8 mile southeast of the project site. In addition, approximately 50 individuals

of this species were mapped at the southeastern edge of the survey area, near the top of the slope where the new water tank is proposed (see Appendix E – Photo 7). As such, recommendations are made for the avoidance, minimization, and mitigation of impacts to this species in Section 4.2 below.

Dwarf calycadenia *(Calycadenia villosa),* CRPR 1B.1
Dwarf calycadenia is an annual herb that is known to occur along the length of the Outer South Coast Ranges, from northern Monterey County to central Santa Barbara County. This species typically occurs in association with grassland and openings in foothill woodland on dry, rocky hills and ridges at elevations ranging from 250 to 850 meters. The typical blooming period is from May to September (Jepson Flora Project 2019). According to CNDDB records (CDFW 2019a), the nearest occurrence is approximately 6.7 miles southeast of the project site.

South Coast Range morning-glory (*Calystegia collina* subsp. *venusta*), CRPR 4.3
South Coast Range morning-glory is a perennial herb that has been documented in disjunct populations from the Inner and Outer Coast Ranges of San Benito, Monterey, and Santa Barbara Counties, with only limited occurrences at the edges of San Luis Obispo County. This species is known to occur in serpentine or sedimentary soils in association with grassland, chaparral, or woodland. It has been documented at elevations below 600 meters and is known to tolerate disturbance. The typical blooming period is from April to June (Jepson Flora Project 2019). According to CNDDB (CDFW 2019a) records, the nearest documented occurrence is approximately 23 miles west of the project site. However, an isolated patch of this species, containing approximately 40 individuals, was mapped just north of the ephemeral drainage and just south of the proposed production facility and tasting room (see Appendix E – Photo 8). As such, recommendations are made for the avoidance, minimization, and mitigation of impacts to this species in Section 4.2 below.

San Luis Obispo owl's-clover (*Castilleja densiflora* subsp. *obispoensis*), CRPR 1B.2
San Luis Obispo owl's clover is an annual herb that is endemic to San Luis Obispo County. Specifically, it is known to occur mostly in coastal areas along the Outer South Coast Ranges from just south of Ragged Point to Avila Beach, with several populations in the Irish Hills of San Luis Obispo County. This species typically grows in coastal grasslands at elevations below 400 meters and may be somewhat tolerant of disturbance. The typical blooming period for this species is from March to June (Jepson Flora Project 2019). According to CNDDB (CDFW 2019a) records, the nearest occurrence is approximately 6.7 miles north of the project site.

Lemmon's jewelflower *(Caulanthus lemmonii),* CRPR 1B.2
Lemmon's jewelflower is an annual herb that is endemic to California. It is known to occur throughout the Inner and Outer South Coast Ranges and along the western foothills of the San Joaquin Valley, with some populations extending east along the Transverse Ranges and into the northwest corner of the Mojave Desert. This species typically occurs in grassland, chaparral, and scrub communities at elevations ranging from 80 to 1,100 meters. The typical

blooming period is from March to May (Jepson Flora Project 2019). According to CNDDB records (CDFW 2019a), the nearest documented occurrence of this species is approximately 4.9 miles north of the site.

Paniculate tarplant *(Deinandra paniculata),* CRPR 4.2
Paniculate tarplant is an annual herb that is native to California and northern Baja California. Known populations are concentrated along the central and southern coastal ranges of California between San Luis Obispo and Baja. This species typically occurs in sandy soils in grassland, open chaparral, and woodland communities at elevations up to 1,320 meters and it is known to tolerate disturbance. The typical blooming period is from May to November (Jepson Flora Project 2019). Documented threats to this species include development, with some historical occurrences known to be extirpated by urbanization (CNPS 2019a). According to CCH (2019) records, the nearest occurrence of this species is approximately 16 miles southwest of the project site.

Yellow-flowered eriastrum *(Eriastrum luteum),* CRPR 1B.2
Yellow-flowered eriastrum is an annual herb that is endemic to a portion of the Inner and Outer South Coast Ranges of Monterey and San Luis Obispo Counties. This species typically occurs in rocky or gravelly soils on drying slopes in association with chaparral, broadleaf forest, and woodland communities. It is known to occur at elevations below 1,000 meters. The typical blooming period is from May to June (Jepson Flora Project 2019). Documented threats to this species include grazing, vehicles, and possibly development (CNPS 2019a). According to CNDDB records (CDFW 2019a), the nearest occurrence is located approximately 4.5 miles south of the project site.

Ojai fritillary *(Fritillaria ojaiensis),* CRPR 1B.2
Ojai fritillary is a perennial herb that is known to occur throughout the Outer South Coast Ranges and the western Transverse Ranges. It typically occurs on rocky slopes and in river basins associated with broadleaf forest, chaparral, woodland, and coniferous forest communities. This species is known to occur at elevations between 300 and 500 meters. The typical blooming period is from February to May (Jepson Flora Project 2019). Documented threats to this species include road maintenance and recreational activities (CNPS 2019a). According to CNDDB records (CDFW 2019a), the nearest documented occurrence of this species is located approximately 8.6 miles southwest of the project site.

Santa Lucia Dwarf Rush (*Juncus luciensis*), CRPR 1B.2
Santa Lucia dwarf rush is an annual herb with several populations along the central and southern coast, as well as areas in the northeast portion of the state from Lake Tahoe to the Modoc Plateau. This species typically grows in a variety of seasonally and perennially wet habitats, including seeps, meadows, vernal pools, along streams, and in roadside ditches at elevations ranging from 1,300 to 1,900 meters. The typical blooming period may span from April through August (Jepson Flora Project 2019). Threats to this species may include

development and grazing. According to CNDDB (CDFW 2019a), the nearest occurrence is approximately 2.0 miles northeast of the project site.

Jones' Bush-mallow (*Malacothamnus jonesii*), CRPR 4.3
Jones' bush-mallow is a shrub up to 3 meters tall that is known from disjunct populations in the Inner North Coast Ranges and Outer South Coast Ranges. This species occurs in open chaparral and woodland habitats. It is known to occur at elevations ranging from 250 to 830 meters. The typical blooming period may span from May to July (Jepson Flora Project 2019). According to CCH records (2019), the nearest documented occurrence is approximately 3.7 miles south of the project site.

Carmel Valley Bush-mallow (*Malacothamnus palmeri* var. *involucratus*), CRPR 1B.2
Carmel Valley bush-mallow is a shrub up to 2.5 meters tall that is known from several disjunct populations along the immediate coast and the Inner South Coast Ranges of Monterey and San Luis Obispo Counties. This taxon typically occurs in valleys, in association with chaparral, woodland, and scrub communities, and is known to occur at elevations ranging from 30 to 800 meters. The typical blooming period is from May to July (Jepson Flora Project 2019). Documented threats to this species include development (CNPS 2019a). According to CNDDB (CDFW 2019a) records, the nearest documented occurrence is approximately 11.3 miles southwest of the project site.

Santa Lucia Bush-mallow (*Malacothamnus palmeri* var. *palmeri*), CRPR 1B.2
Santa Lucia bush-mallow is a shrub up to 2.5 meters tall that is known from several disjunct populations along the immediate coast and the Inner South Coast Ranges of Monterey and San Luis Obispo Counties. This taxon typically occurs in association with chaparral communities of interior valleys and foothills and is known to occur at elevations ranging 30 to 800 meters. The typical blooming period for this species may span from May to July (Jepson Flora Project 2019). Documented threats include altered fire regimes (CNPS 2019a). According to CNDDB records (CDFW 2019a), the nearest documented occurrence of this species is approximately 11.5 miles southwest of the project site.

Oak Trees (*Quercus* spp.) and Oak Woodland, Protected under state and local ordinance
Impacts to or removal of mature oak trees (i.e., greater than five inches in diameter at breast height [DBH]) or oak woodland are regulated under California Public Resources Code 21083.4 and the County Inland Land Use Ordinance (Title 22, Section 22.52.100; County 2019). Oak woodland habitat and individual oak trees were documented on site. If any oak trees are removed or impacted through trimming or placement of fill, and/or ground disturbance within the sensitive root zone (i.e., within six feet of the dripline), mitigation in the form of on-site plantings and/or off-site protection of existing oak woodland habitat areas may be required. As such, recommendations for the avoidance, minimization, and mitigation of impacts to oak trees are included in Section 4.2.

3.2.2 Special-status Wildlife Species

Based on a review of the relevant literature and an assessment of site conditions, it was determined that 9 special-status wildlife species have potential to occur on the project site, based on presence of suitable habitat. In addition to species listed on the federal and California Endangered Species Acts, special-status wildlife species include those that are included on the CDFW Special Animals (CDFW 2019b). The following paragraphs provide a description for all the special-status wildlife species for which suitable habitat was identified on site, and recommendations for the avoidance, minimization, and mitigation of impacts to these species are included in Section 4.2.

Sensitive Mammal Species

American badger (*Taxidea taxus*), State Species of Special Concern (CSC)

The range of American badger covers most of North America and they are, therefore, found throughout California, excluding the North Coast region (Del Norte, Humboldt, Mendocino, Sonoma, and Marin counties). They prefer open and arid habitats such as grasslands, meadows, savannahs, open-canopy desert scrub, and open chaparral. They are predators of fossorial rodents and are adept at quickly excavating deep burrows to access their prey. As such, where badgers are present, the landscape is dotted with large soil tailings, which are normally half-moon-shaped. American badgers shelter in burrows they have excavated and, while they are known to traverse a relatively small home range (up to 2.5 acres) they move among burrows frequently. They can be active at all times of day but are primarily nocturnal. This species occurs at elevations below 3,700 meters. Mating typically occurs from May through September but, because of delayed implantation, cubs are not born until early spring. Habitat conversion is a threat to this species (Zeiner et al. 1988-1990a).

According to CNDDB (CDFW 2019a), a road-killed badger was observed along Highway 101 approximately 3.0 miles west of the project site. No sign (e.g., characteristic claw marks on the interior sides of den entrances, horizontally oriented elliptical den openings, frequent prey excavations) of this species was observed. However, the grassland within the survey area may provide suitable habitat for American badger, including an available prey base (e.g., pocket gophers and squirrels). Based on the nearest documented occurrences, the habitat suitability, and the presence of prey base, there is potential to encounter this species on site.

Pallid Bat (*Antrozous pallidus*), State CSC

Pallid bats range throughout the North American west, from southern British Columbia to central Mexico. They are common throughout California, except for high elevations, and are found in a variety of habitats, such as grasslands, shrublands, woodlands, and mixed conifer forests but are most commonly found in dry habitats with rocky outcrops (Verts and Carraway 1998). Pallid bats will use a variety of roosts, like caves, rock crevices, mines, trees, and buildings. They are year-long residents in their home range and hibernate during the winter (Vaughan and O'Shea 1967). These bats undergo daily torpor and are most active for a couple

of hours after sunset and shortly before sunrise. Pallid bats are sensitive to disturbance and will readily abandon roosting sites.

According to CNDDB (CDFW 2019a), there are two occurrences located 12 and 13 miles south, and one occurrence 13 miles north of the project site. The occurrence to the north and one of the occurrences to the south were of pallid bat roosts in bridges. Pallid bats may forage on site and roost within the adjacent oak woodlands, but suitable maternity colony habitat was not observed within the survey area. No trees are expected to be removed as a result of project implementation within the grassland habitat area; however, installation of the water line may require impacts to and/or removal of individual oak trees and oak woodland habitat, which could result in impacts to roosting bats.

San Joaquin kit fox (*Vulpes macrotis mutica*), Federal Endangered / State Threatened
San Joaquin kit fox (SJKF) is endemic to the San Joaquin Valley and adjacent arid valleys of central California. Highly suitable habitats for kit fox are characterized by sparsely vegetated saltbush scrublands and grasslands dominated by red brome (*Bromus madritensis*) on flat or gently rolling terrain (Brown et al. 2019). The three remaining core populations of SJKF are in 1) Carrizo Plain Natural Area in San Luis Obispo County; 2) natural lands of western Kern County; and 3) the Ciervo-Panoche Natural Area of western Fresno and eastern San Benito Counties (USFWS 1998). The kit fox is adapted to arid climates and primarily preys on small mammals and invertebrates. Kit foxes extensively use dens for protection from the elements, predators, and rearing pups. Mating occurs between December and March and pups are born after a 48- to 52-day gestation period. The pups are reared in the den and begin to emerge approximately one month after birth, and most disperse by August. Kit foxes are primarily nocturnal but may be observed during the day, basking outside the den entrance or taking short excursions. Kit foxes excavate their own dens, enlarge burrows of other species, such as giant kangaroo rats, or den in manmade features, such as culverts. They occupy numerous den sites throughout the year. Many factors have contributed to the decline of San Joaquin kit fox. By the 1950's, loss, degradation, and fragmentation of habitats in the San Joaquin Valley were the primary factors of decline. Many other sources of mortality pose a threat to maintaining viable populations of this species, including disease, parasites, predation, and many human-induced factors such as shooting, trapping, poisoning, electrocution, and vehicle strikes (Brown et al. 2019).

According to CNDDB (CDFW 2019a), the two nearest observations of SJKF are approximately 4.0 and 5.0 miles north of the project site (from 1990 and 1991, respectively). There are no known extant populations of SJKF in the project vicinity. Historical and ongoing vineyard and farming operations within the project vicinity has substantially modified the landscape; as such, kit foxes are not expected to occur on site.

Sensitive Amphibian Species

Western spadefoot (*Spea hammondii*), State CSC

Western spadefoot toad generally inhabits lowlands, sandy washes, and river flood plains but also may be found in woodlands, grasslands, and chaparral where soils are sandy and loose. This species occupies small mammal burrows or uses the hardened spades on its feet to burrow underground where it remains buried for most of the year, only emerging at night during the rainy season to breed in ephemeral pools. Seasonal pools and other breeding locations must stay inundated for at least 30 days for larvae to survive. Threats to this species include loss, degradation, and fragmentation of breeding and upland habitats (Nafis 2019).

According to CNDDB (CDFW 2019a), the nearest observations of western spadefoot were from 2016, approximately 2.6 miles west and from 2005, approximately 3.0 miles north of the project site. No pools were present within the ephemeral drainage at the time of the survey; however, signs of seasonal ponding were observed. Spadefoots maybe present on site if the pools within the drainage have a sufficient hydroperiod to support tadpole development and completion of metamorphosis.

Sensitive Reptile Species

California glossy snake (*Arizona elegans occidentalis*), State CSC

California glossy snakes are common throughout California, especially in arid habitats such as grasslands, chaparral, and washes. This species prefers areas with loose soils for burrowing and is primarily nocturnal, feeding on a variety of lizards, snakes, small mammals, and occasionally birds. They are oviparous and lay 3 to 23 eggs from June to July (Stebbins and McGinnis 2018). The greatest threat to this species is habitat modification due to agricultural, commercial, and residential development (Thompson et al. 2016). California glossy snakes are designated as a Species of Special Concern by the state of California.

According to CNDDB (CDFW 2019a) records, the nearest observation of this species was approximately 12 miles southeast of the project site. The grassland habitat on site and associated loose soil with small mammal burrows provides suitable habitat and forage opportunities. Based on the nearby CNDDB-recorded observation and the presence of suitable habitat, there is potential to encounter this species on site.

Northern California Legless Lizard (*Anniella pulchra*), State CSC

Northern California legless lizard ranges from the northern San Joaquin Valley south through the inner and outer South Coast Ranges, with populations in the southern Sierra Nevada and Tehachapi Mountains, at elevations up to 5,900 feet (Nafis 2019). This species requires moist, sandy or loose loamy soils within coastal dune scrub, coastal sage scrub, chaparral, woodland, riparian, or forest habitats. It shelters in leaf litter and under bushes, rocks, or detritus like logs and driftwood. Relatively little is known about the specific behavior and ecology of this species, but it is thought to be a diurnal species that breeds between the months of March and July. It gives birth to live young in the early fall. Population declines have been attributed to agricultural development, sand mining, use of off-road recreational vehicles, and habitat

loss through spread of invasive, non-native vegetation such as iceplant (Zeiner et al. 1988-1990b).

According to CNDDB (CDFW 2019a) records, there are four observations of this species within 4.0 to 4.5 miles of the project site. Two observations are to the north, documented in 1954 and 1966 and two observations are to the south, documented in 2007 and 1960. The oak woodlands and associated loose soil areas on site provide suitable habitat for this species. Based on the nearby CNDDB observations and the presence of suitable habitat, there is potential for this species to occur on site.

Migratory Nesting Birds and Sensitive Avian Species

Grasshopper sparrow (*Ammodramus savannarum*), State CSC

Within California, grasshopper sparrows breed along the coast, coast ranges and central valley. They are late spring migrants, typically arriving in California in late April and early May. Grasshopper sparrows occur in grasslands with little or no shrub cover, often with patches of bare ground. They forage on grasshoppers and other insects during the summer and eat primarily seeds in the winter. Grasshopper sparrows nest on the ground, often at the base of a clump of grass within an area of tall grasses or sedges. The nest is woven into adjacent vegetation and is usually domed with a side entrance. Grasshopper sparrows can produce two to four broods of three to seven eggs per year (Cornell 2015). According to CNDDB (CDFW 2019a) records, the nearest documented occurrence is located approximately 11 miles south of the project site. The grasslands within the survey area and adjacent may provide suitable nesting habitat for grasshopper sparrows.

Golden eagle (*Aquila chrysaetos*), State Fully Protected

Golden eagle is designated by CDFW as a Fully Protected species (i.e., no permitted take or possession at any time), and is also protected under the federal Bald and Golden Eagle Protection Act (USFWS 2019c). Golden eagles typically occur in open and semi-open habitats, most commonly in mountainous areas with hunting grounds where prey is abundant. Golden eagles typically feed on small mammals and will nest in trees, on cliffs, or other steep escarpments (Cornell 2015). The typical nesting period for golden eagles is from January 1 through September 15. This species is threatened by loss of forage and nesting habitat, secondary pesticide poisoning, and collisions with man-made structures.

According to CNDDB (CDFW 2019a) records, the nearest documented occurrence is located approximately 6.0 miles north of the project site. The blue oak woodland within the survey area and the project vicinity may provide suitable nesting habitat for this species. In addition, the ground squirrels observed on site provide a suitable prey source.

Western burrowing owl (*Athene cunicularia*), State CSC

Burrowing owls generally inhabit open grasslands, prairies, and fields with short-stature vegetation, but may also occupy agricultural and developed areas (Shuford et al. 2008). This species typically uses the burrows of ground squirrels and other small mammals for shelter, protection from predators, and rearing of chicks. Burrowing owls are active day and night and

can be seen roosting outside burrow entrances during the day. Courtship and mating may begin as early as late December in California and continue into early spring. Incubation lasts 28 to 30 days and young disperse to nearby burrows by early fall. The primary threats to burrowing owls are the elimination of burrowing mammals through control programs and habitat loss (Klute et al. 2003).

Several occurrences of burrowing owls have been recorded in the CNDDB (CDFW 2019a) approximately 14 miles northwest of the site at Camp Roberts, with the most recent record from 2004. Some suitable ground squirrel burrows were observed within the grassland on site. Based on the presence of marginally suitable habitat, there is potential to encounter burrowing owls on site.

White-tailed kite (*Elanus leucurus*), State Fully Protected
White-tailed kite is a resident to coastal valleys and lowlands of California where it inhabits herbaceous and open stands of various habitats, often near agricultural operations. Nest sites are typically placed on the top of a tall tree near or within riparian areas, with adjacent grasslands for foraging. Typical prey items include voles and other small diurnal mammals, but they will occasionally feed on birds, insects, reptiles, and amphibians (Zeiner et al. 1988-1990c). According to CNDDB records (CDFW 2019a), the nearest documented occurrence of this species is approximately 12 miles south of the project site. However, suitable nesting habitat is present within the oak woodlands and individual valley oaks on site. Additionally, white-tailed kite may forage in the project area.

Migratory Nesting Birds
In addition to those species protected by the state or federal government, all native avian species are protected by state and federal legislature, most notably the Migratory Bird Treaty Act (MBTA) and the CDFW Fish and Game Code. Collectively, these regulations make it unlawful to collect, sell, pursue, hunt, or kill native migratory birds, their eggs, nests, or any parts thereof. Avian species are expected to occur within the project area during all seasons and throughout construction of the proposed project. The potential to encounter and disrupt these species is generally highest between February 1 and September 15, when nests are likely to be active, with eggs and/or young present. The oak woodlands and individual valley oaks present the highest quality habitat for nesting at the site, but open grasslands may also provide nesting habitat for various ground-nesting species. Raptors are particularly drawn to large trees and structures, and they are generally less tolerant of disturbances than other species. As such, recommendations are made for the avoidance, minimization, and mitigation of impacts to migratory nesting birds in Section 4.2 below.

3.2.3 Sensitive Habitats

Federal and State Waters and Wetlands
One drainage was identified as jurisdictional waters of the state and U.S. due to the presence of a well-defined bed and bank, including evidence of an ordinary high water mark, and a significant nexus to navigable waters of the U.S. (i.e., the Pacific Ocean via the Salinas River). The water

supply line for the winery facility will be installed under the ephemeral drainage using HDD methodology to avoid impacts to the drainage. If impacts are proposed to this drainage feature, appropriate permits and associated mitigation would be necessary per CDFW, RWQCB, and Corps requirements.

3.3 Habitat Connectivity

Maintaining connectivity between areas of suitable habitat is critical for the survival and reproduction of plants and wildlife. Intact habitats benefit plants by ensuring proper dispersal of pollen and seeds, which sustains or grows the population and contributes to the genetic health of the species. Wildlife need contiguous habitats for the acquisition of food; access to mates and suitable habitat that supports reproduction, migration, and rest; and for the successful dispersal of young. The project site is in a semi-rural area of San Luis Obispo County. Large tracts of undeveloped land are present in the surrounding landscape. However, existing barriers to migration, particularly for wildlife, include public roadways and a moderate density of agricultural operations in the region, which typically correlates with a high frequency of land manipulation, wildlife-exclusion fences, and pest management activities. The proposed project is not expected to increase the level of terrestrial habitat fragmentation in the region nor is it expected to create new barriers to aquatic migration.

4.0 IMPACT ASSESSMENT

4.1 Summary of Potential Impacts

The proposed project has potential to directly or indirectly impact sensitive plant communities and/or wildlife species. Injury or death of plants and wildlife could result from construction-related disturbances, such as vehicle strikes, trampling, or crushing from equipment or other construction-related activities, such as grading, vegetation trimming or removal, and excavation. Indirect impacts could result from construction noise, harassment, dust emissions or other disruption during construction activities.

4.1.1 Impacts to Special-status Plants

Special-status Botanical Species

Two special-status botanical species were documented and mapped within the survey area: Salinas milk-vetch and South Coast Range morning-glory. Per the preliminary site plans dated May 03, 2019, both species occur outside the proposed development footprint. However, the new water line and water tank have not yet been sited. As such, direct impacts to these species may occur if individual plants or portions of the seed bank are removed during construction or long-term operations of the proposed project. No other special-status botanical species are expected to occur on site or be impacted by proposed project activities.

Oak Trees and Oak Woodland

Several mature oak trees are located within 100 feet of the proposed winery and tasting room facility and the new water tank, and the water supply line will be installed beneath the blue oak woodland on the slope to the southeast using HDD. No oak tree removals are expected during project implementation; however, trimming and/or disturbance within the critical root zone of several trees may be required. Impacts to or removal of individual oak trees and oak woodland habitat are regulated under are regulated under California Public Resources Code 21083.4 and the County Inland Land Use Ordinance (Title 22, Section 22.52.100; County 2019).

4.1.2 Impacts to Special-status Wildlife

Special-status Mammals

If American badger occurs at the site, there is potential for direct or indirect impacts to occur during construction. Construction poses several risks to wildlife, such as vehicle strikes, crushing by equipment, and destruction of resources (e.g., burrows or dens). Further, construction may impact valuable habitat, yielding it unsuitable for special-status mammals. Indirect impacts may also occur as a result of deterring these species from using the site during construction.

Direct and indirect impacts to pallid bats may occur if roosts are present in the oak trees on site. This may include roosting deterrent due to increased disturbance on site and/or removal of available roosting habitat if oak trees are removed or impacted during construction.

Special-status Amphibians and Reptiles

Construction activities pose risks for direct and indirect impacts to special-status amphibians and reptiles. For example, reptiles basking on roadways will be especially vulnerable to vehicle strikes. Reptiles can be slow-moving, both because of behavioral adaptations to be camouflaged from predators and because of their ectothermic nature. This trait presents crushing hazards in the presence of relatively fast-moving equipment or even foot traffic. All special-status amphibians and reptiles presumed to be on the project site rely heavily on burrows or emergent vegetation for shelter from the elements, protection from predators, and/or reproduction. Heavy equipment and ground disturbing activities may collapse burrow systems or completely remove them, resulting in injury or death of the inhabitants or exclusion by the removal of a vital resource. Vegetation may also be removed as a result of construction activities. Ectotherms rely on vegetative cover for temperature regulation and, further, vegetation provides habitat for the prey species of reptiles and amphibians. If western spadefoot toad occurs on or near the project site, they will be particularly vulnerable during the rainy season when they are most active.

Sensitive and Nesting Birds

Direct impacts to avian species, like nest disturbance, are most likely to occur if construction activities take place during the typical avian nesting season, generally February 1 through September 15. Indirect impacts may occur due to habitat loss (e.g., removal of suitable nesting shrubs, burrows or herbaceous cover) or construction-related disturbances that may deter nesting or cause nests to fail.

4.1.3 Impacts to Sensitive Habitats

Hydrological Resources

The water supply line is proposed to be installed under the drainage via HDD methodology. Impacts to this drainage may occur during construction as a result of frac-out and/or inadvertent materials released during HDD operations, erosion and sedimentation during grading in the adjacent grassland, or during long-term operations if the amount of impervious surfaces and/or the type and quantity of runoff is modified in the vicinity of the drainage.

4.2 Recommended Avoidance, Minimization, and Mitigation Measures

The following avoidance, minimization, and mitigation measures are recommended to reduce the anticipated impacts to the maximum extent feasible.

4.2.1 General Measures

Measure 1: Environmental Awareness Training

An environmental awareness training shall be presented to all construction personnel by a qualified biologist prior to start of any project activities. The training shall include color photographs and a description of the ecology of all special-status species known or with potential to occur, as well as other sensitive resources requiring avoidance during construction. The training shall also include a description of protection measures required by discretionary permits, an overview of the Federal and State Endangered Species Acts, and implications of noncompliance with these regulations. This will include an overview of the required avoidance, minimization, and mitigation measures. A sign-in sheet with the name and signature of the qualified biologist who presented the training and the names and signatures of the environmental awareness trainees will be kept. A fact sheet conveying the information provided in the environmental awareness training will be provided to all project personnel and anyone else who may enter the project site.

If new construction personnel join the project after the initial training period, they will receive the environmental awareness training from the qualified biologist before beginning work. Visitors to the proposed project site, such as company executives, administrative staff, or other guests, are not required to receive the environmental awareness training, as it is expected their time in the project area will be of short duration. Visitors may be independent on the proposed project site if they elect to receive the training, but otherwise must be escorted by someone who is trained.

Measure 2: Site Maintenance and General Operations

The following general measures are recommended to minimize impacts to sensitive resources during active construction:

- The use of heavy equipment and vehicles shall be limited to the proposed project limits and defined staging areas/access points. The boundaries of each work area shall be clearly defined and marked with high visibility fencing. No work shall occur outside these limits.
- In proximity to sensitive resources and habitats (e.g., drainages), signs shall be posted at the boundary of the work area indicating the presence of sensitive resources.
- Project plans, drawings, and specifications shall show the boundaries of all sensitive resource areas and the location of erosion and sediment controls, delineation of construction limits, and other pertinent measures to ensure the protection of sensitive habitats and resources.
- Staging of equipment and materials shall occur in designated areas with appropriate demarcation and perimeter controls. No staging areas shall be located within 100 feet of sensitive habitat or jurisdictional aquatic resources.
- Secondary containment, such as drip pans, shall be used to prevent leaks and spills of potential contaminants.
- Washing of concrete, paint, or equipment, and refueling and maintenance of equipment shall occur only in designated staging areas. These activities will occur at a minimum of 100 feet from sensitive habitat or jurisdictional aquatic resources, including drainages. Sandbags and/or absorbent pads and spill control kits shall always be available on site to prevent fuel spills and other contaminants from leaving the site.
- Construction equipment shall be inspected by the operator daily to ensure that equipment is in good working order and no fuel or lubricant leaks are present.
- Plastic monofilament netting (erosion control matting) or similar material will not be used on site due to the potential to entangle special-status wildlife. Acceptable substitutes are coconut coir matting, biodegradable fiber rolls, or tackified hydroseeding compounds.

4.2.2 Measures to Address Impacts to Sensitive Habitats

Measure 3: Federal and State Waters and Wetlands

In addition to Measure 2, the following recommendations have been provided to protect drainage features and aquatic resources on site.

- Construction activity within 100 feet of drainages shall occur only when conditions are dry.
- The limits of agency jurisdiction associated with the ephemeral drainage shall be shown on project site plans, as well as a 50-foot minimum set back. All construction activity shall remain outside the 50-foot setback area, unless specifically approved by the County, CDFW, RWQCB, and the Corps, as applicable.
- To prevent erosion and sedimentation into drainages during construction, an erosion and sedimentation control plan shall be developed and implemented. It shall outline Best Management Practices for short term, temporary stabilization. Acceptable stabilization methods include the use of weed-free, natural fiber (i.e., non-monofilament) rolls, jute or

coir netting, and/or other industry standards. Erosion control devices shall be installed and maintained for the duration of the project.

- A Frac-out Contingency Plan shall be prepared for HDD operations and shall include appropriate measures for containment of spills, agency notifications, clean-up protocols, and procedures for restoring the drainage to pre-disturbance conditions. The "Frac-out" clean-up procedures shall emphasize minimizing and/or avoiding impacts to the main channel and associated oak woodland habitat areas of the drainage feature.
- Site disturbance and construction activities associated with the HDD operations shall not occur during the rainy season (i.e., October 01 to June 01).
- In the event that a "frac-out" occurs within the drainage due to HDD operations, the appropriate permits shall be obtained by the governing regulatory agencies to facilitate clean-up and restoration of the affected portions of the drainage channel to pre-project conditions. As necessary, this shall include a 404 Permit from the Army Corps of Engineers, a 401 Permit from the RWQCB and Streambed Alteration Agreement from CDFW.
- Prior to project initiation, all applicable agency permits with jurisdiction over the project area (i.e., Corps, CDFW, RWQCB, and USFWS) should be obtained, as necessary. Additional mitigation measures may be required by these agencies and shall be implemented as necessary throughout the project.

4.2.3 Measures to Address Impacts to Special-status Botanical Species

Measure 4: Avoidance and Protection of Special-status Plant Populations

Prior to issuance of a grading permit, mapped populations of Salinas milk-vetch and South Coast Range morning-glory shall be shown on project site plans and flagged in the field for avoidance. All construction activities shall avoid the flagged areas to the maximum extent feasible.

Measure 5: Mitigation for Impacts to Special-status Plant Populations

If mapped populations of special-status botanical species cannot be avoided during construction (i.e., if avoidance is deemed infeasible), a mitigation plan for impacts to special-status botanical species shall be developed prior to the start of construction and implemented during construction. At a minimum, the plan shall include the following:

- Discuss the proposed construction methods, construction schedule, and the implementation schedule of activities.
- Quantify the anticipated acreages of impact to each special-status species.
- Identify each special-status botanical species observed on site, including a description of the mitigation activities proposed for each. As appropriate, the measures shall include:
    - A detailed description of topsoil salvage procedures and long-term soil stockpile storage methods;
    - Methods and timing of any proposed seed collection and storage;

- Locations and demarcation of full-time avoidance areas during construction;
- Locations and methods for restoration, replanting and/or reseeding (e.g., decompaction, recontouring, scarification, mulching, hand broadcasting, hydroseeding, etc.); and,
- Short- and/or long-term monitoring protocols and/or vegetative growth success criteria for restoration.

- Require photographic documentation and a post-implementation report.

The plan shall be submitted for approval to CDFW and the County prior to the start of construction.

Measure 6: Protection and Avoidance of Oak Trees and Oak Woodland

Prior to issuing a grading permit, all oak trees expected to be impacted and/or removed as a result of project activities will be identified and included on development plans. The County may require an oak tree replacement plan be submitted prior to permit issuance. The following avoidance and minimization measures shall be implemented if project construction requires impacts to or removal of oak trees on the site, or if work is conducted within 100 feet of any oak tree:

- The canopy edge and trunk location of oak trees located within 100 feet of proposed construction shall be surveyed by a licensed land surveyor or other qualified individual and placed on all plan sets. The tree map shall be used to identify impacts and will inform the mitigation plan.
- Impacts to the oak canopy or sensitive root zone should be avoided to the extent feasible. Impacts may include pruning, ground disturbance or placement of impervious surfaces (e.g., asphalt, permanent structures) within the sensitive root zone, installation of year-round irrigation or other supplemental water within the sensitive root zone, and trunk damage.
- Prior to ground-breaking, tree protection fencing shall be installed as close to the outer limit of the sensitive root zone as practicable for construction operations to protect trees that will be preserved. The fencing shall be in place throughout the duration of construction.
- No grading or staging shall occur within the fenced areas around protected trees.
- An arborist certified by the International Society of Arboriculture (ISA) will be hired for all removal of existing roots and branch trimming. Any roots exposed during construction shall be treated by a tree care specialist and covered with a layer of soil to match existing topography.
- Impacts to oak trees shall be assessed by a licensed arborist or qualified botanist prior to final inspection and reported to the County.

Measure 7: Mitigation for Impacts to Oak Trees and Oak Woodland

In the event of oak tree removals or impacts during project implementation, the owner shall provide mitigation (on site if feasible) per the County's guidelines, typically 4:1 for removals and

2:1 for impacted trees. This shall include development of an oak tree replacement plan and establishment of an oak tree planting site that shall be protected in perpetuity.

4.2.4 Measures to Address Impacts to Special-status Wildlife

Measure 8: Protection from Nighttime Nuisance Lighting

All exterior lighting will be placed or shielded to avoid lighting of natural habitat area, including oak woodlands and the ephemeral drainage. No permanent night lighting will be installed, except for security and maintenance needs of the constructed facility. Temporary construction lighting will be kept to the minimum amount necessary and shall be directed toward active work areas and away from oak woodland and the drainage.

Measure 9: Pre-construction Survey for American Badger

A qualified biologist shall conduct a pre-construction survey within 30 days prior to the start of initial project activities to ensure badger are not present within proposed work areas. If potential dens are discovered, they shall be monitored with a remote camera or tracking medium for at least three days to determine if they are occupied. If no activity is observed at the den, the den can be determined inactive and the entrances will be sufficiently blocked by a qualified biologist to prevent occupation prior to construction. If the qualified biologist determines that potential dens may be active, an exclusion buffer of 50 feet shall be established around the den, and the appropriate resource agencies shall be contacted for further guidance. If active dens are found during the breeding and rearing season, no activity shall occur within 200 feet of the den without agency guidance and approval.

Measure 10: Surveys and Monitoring for Roosting Bats

If trimming or removal of mature trees is planned to occur during the typical bat maternity roosting and pupping season between February 1 and August 31, a qualified biologist shall conduct a pre-activity survey within 14 days prior to ensure roosting bats are not present. If bat roosting is observed, work activities will be avoided within 100 feet of active roosts until bats have left the roosts. No trees or structures with active bat roost may be removed until they have left the roosts or have been excluded from roosts. The appropriate timing for exclusion implementation will be determined based upon the species identified.

Measure 11: Surveys for Special-status Amphibians and Reptiles

A qualified biologist shall conduct a pre-activity survey within one week prior to the start of initial project activities to ensure special-status amphibians and reptiles are not present within proposed work areas.

Measure 12: Monitoring for Special-status Amphibians and Reptiles

A qualified biologist shall conduct full-time monitoring during initial vegetation removal and grubbing within suitable habitat for legless lizard and California glossy snake.

In addition, to minimize the potential for impacts to dispersing amphibians, work within 100 feet of drainages shall only occur during dry conditions. If work within 100 feet of drainages is scheduled to start during the typical rainy season (i.e., November through May), when western

spadefoot toads are most likely to be dispersing through upland habitat, a qualified biologist shall conduct daily site inspections prior to the start of work each morning. All vehicles, equipment, and materials staged on site overnight shall be inspected for wildlife.

If special-status wildlife is found within the work area, it shall be allowed to leave on its own volition and, as appropriate, the resource agencies shall be contacted.

Measure 13: Pre-construction Survey for Burrowing Owl

If work will occur within 150 meters (492 feet) of burrowing owl habitat, during the breeding or non-breeding seasons, a qualified biologist shall conduct a preconstruction survey for this species within 14 days prior to the start of any construction activities. A second survey shall be completed immediately prior to construction (i.e., within the preceding 24 hours). The surveys shall be consistent with the methods outlined in Appendix D of the California Department of Fish and Wildlife 2012 Staff Report on Burrowing Owl Mitigation (Staff Report). Qualified biologists will walk 7-to 20-meter-wide (20- to 65-foot) transects through the survey area and visually scan the entire project area for sign and individuals. These surveys may be completed concurrently with any necessary American badger or other special-status species surveys.

If occupied burrowing owl burrows are identified, the following buffer distances shall be observed by construction, unless otherwise authorized by CDFW:

Location	Time of Year	Level of Disturbance		
		Low	Medium	High
Nesting Sites	April 1–Aug 15	656 feet	1,640 feet	1,640 feet
Nesting Sites	Aug 16–Oct 15	656 feet	656 feet	1,640 feet
Any Occupied Burrow	Oct 16–Mar 31	164 feet	328 feet	1,640 feet

If avoidance of active burrows is infeasible, the owls can be passively displaced from their burrows according to recommendations made in the Staff Report, and in coordination with CDFW.

Measure 14: Pre-construction Survey for Nesting Birds

If work is planned to occur between February 1 and September 15, a qualified biologist shall survey the area for nesting birds within one week prior to activity beginning on site. If nesting birds are located on or near the proposed project site, they shall be avoided until they have successfully fledged or the nest is no longer deemed active. A non-disturbance buffer of 50 feet shall be placed around non-listed, passerine species, and a 250-foot buffer will be implemented for raptor species. All activity will remain outside of that buffer until a qualified biologist has determined that the young have fledged or that proposed construction activities would not cause adverse impacts to the nest, adults, eggs, or young. If special-status avian species are identified,

no work will begin until an appropriate buffer is determined in consultation with the local CDFW biologist, and/or the USFWS.

5.0 CONCLUSION

The proposed project has the potential to result in impacts to sensitive biological resources, which is most likely to occur during the initial project implementation and construction period. Preliminary site plans include installation of a new water supply line underneath the ephemeral drainage via HDD; however, this component of the project is still being designed and is not shown on preliminary site plans. Two special-status botanical species were observed within the survey area: Salinas milk-vetch and South Coast Range morning-glory. No additional special-status botanical species are expected to occur on the project site. No special-status wildlife species were observed during field surveys; however, species that have potential to occur on site include American badger, pallid bat, burrowing owl, western spadefoot, Northern California legless lizard, California glossy snake, white-tailed kite, golden eagle, grasshopper sparrow, and nesting birds. Overall, the extent of potential impacts to sensitive biological resources as a result of proposed project implementation are expected to be minimal, and implementation of the recommended measures will avoid and/or minimize impacts to sensitive resources to a less than significant level.

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APPENDIX A – PROJECT MAPS

Figure 1: Project Vicinity Map
Figure 2: Survey Area Map
Figure 3: 5-mile CNDDB and Critical Habitat Map
Figure 4: Soils Map
Figure 5: Vegetation Communities and Sensitive Resources Map

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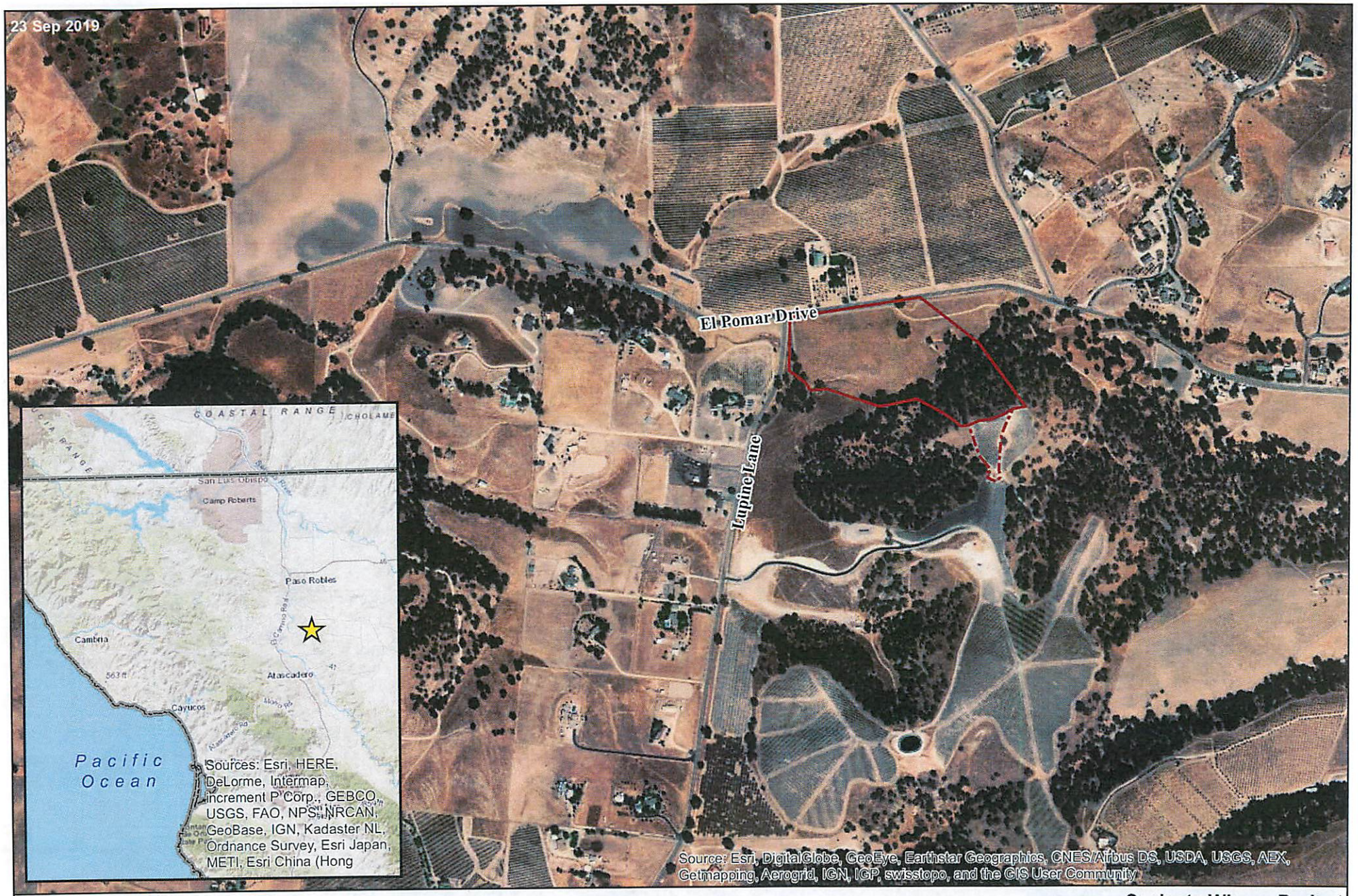

Caelesta Winery Project
Biological Resources Assessment Report
Figure 1: Project Vicinity Map

Project Location

Pedestrian Survey Area

Reconnaissance Survey Area

0 500 1,000 2,000 Feet

N

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Pedestrian Survey Area

Reconnaissance Survey Area

Blue Line Drainage*

0 250 500 Feet

Caelesta Winery Project
Biological Resources Assessment Report
Figure 2: Survey Area Map

N

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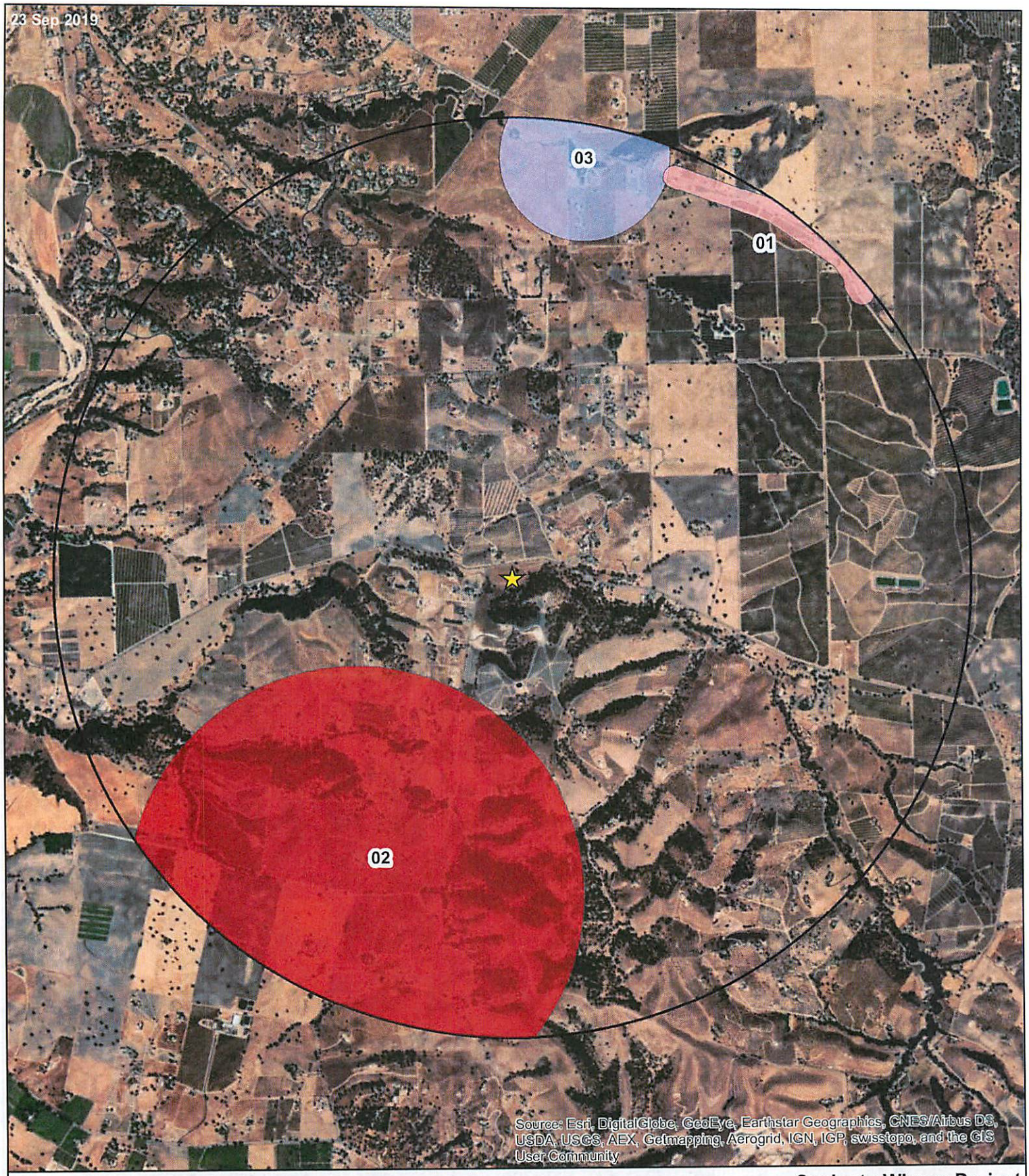

Project Location

Botanical Occurrences

01 - Santa Lucia dwarf rush

02 - Shining navarretia

Wildlife Occurrences

03 - Tricolored blackbird

0 0.5 1 2 Miles

N

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Caelesta Winery Project
Biological Resources Assessment Report
Figure 3: 2-mile CNDDB Occurrences Map



Pedestrian Survey Area

Reconnaissance Survey Area

Soil Units

Lockwood-Concepcion Complex, 2-9% Slopes

Linne-Calodo Complex, 9-30% Slopes

Linne-Calodo Complex, 50-75% Slopes

Feet

0 250 500

N

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Caelesta Winery Project
Biological Resources Assessment Report
Figure 4: Soils Map



Caelesta Winery Project
Biological Resources Assessment Report
Figure 5: Vegetation Communities and Sensitive Resources Map

Pedestrian Survey Area

Reconnaissance Survey Area

Vegetation Communities

Wild Oats Grassland

Blue Oak Woodland

Coast Live Oak Woodland

Valley Oak Woodland

Active Vineyard

Special-status Species

Salinas Milk-vetch

South Coast Range Morning-glory

Isolated Valley Oak

N

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0 250 500 Feet

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Appendix B – Preliminary Site Plans (Dated 07-12-19)

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Appendix C – Regionally Occurring Special-Status Species

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Regionally occurring special-status species list for the Templeton, and surrounding 7.5-minute quadrangles: Adelaida, Atascadero, Creston, Estrella, Morro Bay North, Paso Robles, Santa Margarita, and York Mountain

SENSITIVE VEGETATION COMMUNITIES AND HABITATS			
Community/ Habitat[1]	**Description[2]**	**Observed on Site?[3]**	**Comments**
California Natural Diversity Database (CNDDB)-designated Sensitive Natural Communities			
Valley Oak Woodland	Open, grassy-understoried savanna rather than a closed-canopy woodland. *Quercus lobata* is usually the only tree present, and most stands have an open canopy. Usually occurs on deep, well-drained alluvial soils, usually in valley bottoms.	**Yes**	In addition to individual valley oaks, a small patch of valley oak woodland was mapped at the southwestern edge of the survey area, in association with an ephemeral drainage.
Northern Interior Cypress Forest	An open, fire maintained scrubby forest. Dominated by *Cupressus* species with dry, rocky, ultramafic soils. Often associated with serpentine chaparral.	No	This community was not present on site.

[1]List of sensitive vegetation communities and habitats obtained from CNDDB and USFWS Critical Habitat Portal (CNDDB, 2018; USFWS, 2018a).
[2]Community and habitat descriptions acquired from CNDDB and the U.C. Santa Barbara (UCSB) California Gap Analysis Project (CNDDB, 2018; UCSB, 2012).
[3]Communities observed during field surveys indicated with **bold** font and gray highlight, and are discussed further in the report.

BOTANICAL SPECIES					
Scientific/Common Name[1]	**Listing Status[2]**	**Blooming Period[3]**	**Habitat Type[3]**	**Observed/ Habitat Present?[4]**	**Comments**
Abies bracteata Bristlecone fir	CRPR 1B.3	N/A	Steep, rocky, fire-resistant slopes; generally in canyon live oak phase of mixed-evergreen forest. Elevation: 210 – 1,600 m.	No / No	No suitable habitat on site; not observed during appropriately timed survey.
Abronia maritima Red sand-verbena	CRPR 4.2	February – October	Coastal dunes. Elevation: < 100 m.	No / No	No suitable habitat on site; not observed during appropriately timed survey.
Agrostis hooveri Hoover's bent grass	CRPR 1B.2	April – August	Dry sandy soils, open chaparral, oak woodland. Elevation: < 600 m.	No / No	No suitable habitat on site; not observed during appropriately timed survey.
Amsinckia douglasiana Douglas' fiddleneck	CRPR 4.2	March – June	Unstable, shaly, sedimentary slopes. Elevation: 100 – 1,600 m.	No / Yes	Low suitability habitat present on site; not observed during appropriately timed survey.
Antirrhinum ovatum Oval-leaved snapdragon	CRPR 4.2	May – July	Heavy, adobe-clay soils on gentle, open slopes, and disturbed areas. Elevation: 200 – 1,400 m.	No / No	No suitable habitat on site; not observed during appropriately timed survey.
Arctostaphylos luciana Santa Lucia manzanita	CRPR 1B.2	January – March	Shale outcrops, slopes, upland chaparral near coast. Elevation: 100 – 800 m.	No / No	No suitable habitat on site; not observed during appropriately timed survey.
Arctostaphylos obispoensis Bishop manzanita	CRPR 4.3	February – March	Rocky, generally serpentine soils, chaparral, open closed-cone forest near coast. Elevation: 60 – 950 m.	No / Yes	Low suitability habitat present on site; not observed during spring survey.
Arctostaphylos pilosula Santa Margarita manzanita	CRPR 1B.2	December – March	Shale outcrops, slopes, chaparral. Elevation: 30 – 1,250 m.	No / No	No suitable habitat on site; not observed during appropriately timed survey.
Astragalus didymocarpus var. *milesianus* Miles' milk-vetch	CRPR 1B.2	March – May	Grassy areas near coast. Elevation: < 400 m.	No / No	No suitable habitat on site; not observed during appropriately timed survey.

BOTANICAL SPECIES					
Scientific/Common Name[1]	**Listing Status[2]**	**Blooming Period[3]**	**Habitat Type[3]**	**Observed/ Habitat Present?[4]**	**Comments**
Astragalus macrodon **Salinas milk-vetch**	CRPR 4.3	April – June	Eroded pale shales or sandstone, serpentine alluvium. Elevation: 200 – 1,550 m.	**Yes / Yes**	Suitable habitat present on site; observed in southern portion of survey area.
Calochortus obispoensis San Luis mariposa-lily	CRPR 1B.2	May – June	Dry serpentine, generally open chaparral. Elevation: 100 – 500 m.	No / No	No suitable habitat on site; not observed during appropriately timed survey.
Calochortus simulans La Panza mariposa lily	CRPR 1B.3	May – July	Sand (often granitic), grassland, and yellow pine forest. Elevation: < 1,100 m.	No / No	No suitable habitat on site; not observed during appropriately timed survey.
Calycadenia villosa Dwarf calycadenia	CRPR 1B.1	May – September	Dry, rocky hills, ridges, openings in foothill woodland, grassland. Elevation: 250 – 850 m.	No / Yes	Low suitability habitat present on site; not observed during appropriately timed survey.
Calystegia collina **subsp. *venusta* South Coast Ranch morning-glory**	CRPR 4.3	April – June	Open grassy or rocky places or in open oak/pine woodland, often serpentine. Elevation: < 600 m.	**Yes / Yes**	Suitable habitat present on site; observed along edge of ephemeral drainage/oak woodland habitat.
Calystegia subacaulis ssp. *episcopalis* Cambria morning-glory	CRPR 4.2	April – June	Dry, open scrub, woodland. Elevation: < 500 m.	No / No	No suitable habitat on site; not observed during appropriately timed survey.
Camissoniopsis hardhamiae Hardham's evening primrose	CRPR 1B.2	March – May	Sandy soil, limestone; disturbed or burned areas in oak woodland. Elevation: 60 – 600 m.	No / No	No suitable habitat on site; not observed during appropriately timed survey.
Carex obispoensis San Luis Obispo sedge	CRPR 1B.2	March – June	Springs, streamsides in chaparral, generally on serpentine. Elevation: < 800 m.	No / No	No suitable habitat on site; not observed during appropriately timed survey.
Castilleja densiflora subsp. *obispoensis* San Luis Obispo owl's clover	CRPR 1B.2	March – June	Coastal grassland. Elevation: < 400 m.	No / Yes	Low suitability habitat present on site; not observed during appropriately timed survey.
Caulanthus lemmonii Lemmon's jewelflower	CRPR 1B.2	March – May	Valley and foothill grassland, chaparral, scrub. Elevation: 80 – 1,100 m.	No / Yes	Suitable habitat present on site; not observed during appropriately timed survey.

BOTANICAL SPECIES					
Scientific/Common Name[1]	**Listing Status[2]**	**Blooming Period[3]**	**Habitat Type[3]**	**Observed/ Habitat Present?[4]**	**Comments**
Ceanothus cuneatus var. *fascicularis* Lompoc ceanothus	CRPR 4.2	February – May	Sandy substrates in coastal chaparral. Elevation: < 275 m.	No / No	No suitable habitat on site; not observed during appropriately timed survey.
Chorizanthe breweri Brewer's spineflower	CRPR 1B.3	March – July	Gravel or rocks. Elevation: 60 – 800 m.	No / No	No suitable habitat on site; not observed during appropriately timed survey.
Chorizanthe douglasii Douglas's spineflower	CRPR 4.3	April – July	Sand or gravel. Elevation: 200 – 1,600 m.	No / No	No suitable habitat on site; not observed during appropriately timed survey.
Chorizanthe palmeri Palmer's spineflower	CRPR 4.2	May – August	Serpentine soil. Elevation: 60 – 700 m.	No / No	No suitable habitat on site; not observed during appropriately timed survey.
Chorizanthe rectispina Straight-awned spineflower	CRPR 1B.3	May – July	Sand or gravel. Elevation: 200 – 600 m.	No / No	No suitable habitat on site; not observed during appropriately timed survey.
Cirsium fontinale var. *obispoense* San Luis Obispo fountain thistle	Fed: Endangered State: Endangered CRPR 1B.2	April – October	Serpentine seeps and streams. Elevation: < 350 m.	No / No	No suitable habitat on site; not observed during appropriately timed survey.
Cirsium occidentale var. *lucianum* Cuesta ridge thistle	CRPR 1B.2	April – July	Chaparral, woodland or forest openings, often on serpentine. Elevation: 500 – 750 m.	No / No	No suitable habitat or elevation range on site; not observed during appropriately timed survey.
Clarkia exilis Slender clarkia	CRPR 4.3	April – May	Woodland. Elevation: < 1000 m.	No / No	No suitable habitat or known range on site; not observed during appropriately timed survey.
Convolvulus simulans Small-flowered morning-glory	CRPR 4.2	April – June	Clay substrates, occasionally serpentine, seeps, annual grassland, coastal sage scrub, chaparral. Elevation: 30 – 875 m.	No / No	No suitable habitat on site; not observed during appropriately timed survey.

BOTANICAL SPECIES					
Scientific/Common Name[1]	**Listing Status[2]**	**Blooming Period[3]**	**Habitat Type[3]**	**Observed/ Habitat Present?[4]**	**Comments**
Deinandra paniculata Paniculate tarplant	CRPR 4.2	May – November	Grassland, open chaparral and woodland, disturbed areas, often in sandy soils. Elevation: < 1,320 m.	No / Yes	Suitable habitat present on site; not observed during appropriately timed survey.
Delphinium parryi subsp. *blochmaniae* Dune larkspur	CRPR 1B.2	April – May	Coastal chaparral, coastal dunes, sand. Elevation: < 200 m.	No / No	No suitable habitat on site; not observed during appropriately timed survey.
Delphinium parryi subsp. *eastwoodiae* Eastwood's larkspur	CRPR 1B.2	March – May	Uncommon. Coastal chaparral, grassland, on serpentine. Elevation: 100 – 500 m.	No / No	No suitable habitat on site; not observed during appropriately timed survey.
Delphinium umbraculorum Umbrella larkspur	CRPR 1B.3	April – June	Moist oak forest. Elevation: 400 – 1,600 m.	No / No	No suitable habitat or elevation range on site; not observed during appropriately timed survey.
Dudleya abramsii ssp. *bettinae* Betty's dudleya	CRPR 1B.2	May – June	Rocky outcrops in serpentine grassland. Elevation: 50 – 180 m.	No / No	No suitable habitat on site; not observed during appropriately timed survey.
Dudleya abramsii ssp. *murina* Mouse gray dudleya	CRPR 1B.3	May – June	Serpentine outcrops. Elevation: 120 – 300 m.	No / No	No suitable habitat on site; not observed during appropriately timed survey.
Dudleya blochmaniae ssp. *blochmaniae* Blochman's dudleya	CRPR 1B.3	April – June	Open, rocky slopes, often serpentine or clay-dominated. Elevation: < 450 m.	No / No	No suitable habitat on site; not observed during appropriately timed survey.
Eleocharis parvula Small spikerush	CRPR 4.3	Late winter – fall	Brackish wet soil, coastal. Elevation: < 50 m.	No / No	No suitable habitat on site; not observed during appropriately timed survey.
Eriastrum luteum Yellow-flowered eriastrum	CRPR 1B.2	May – June	Drying slopes, sandy or gravelly soil, typically in association with chaparral or woodland. Elevation: < 1,000 m.	No / Yes	Suitable habitat present on site; not observed during appropriately timed survey.
Erigeron blochmaniae Blochman's leaf daisy	CRPR 1B.2	July – October	Sand dunes and hills. Elevation: < 70 m.	No / No	No suitable habitat on site; not observed during spring survey.

BOTANICAL SPECIES					
Scientific/Common Name[1]	**Listing Status[2]**	**Blooming Period[3]**	**Habitat Type[3]**	**Observed/ Habitat Present?[4]**	**Comments**
Extriplex joaquinana San Joaquin spearscale	CRPR 1B.2	April – September	Alkaline soils. Elevation < 350 (840) m.	No / No	No suitable habitat on site; not observed during appropriately timed survey.
Fritillaria ojaiensis Ojai fritillary	CRPR 1B.2	February – May	Rocky slopes, river basins. Elevation: 300 – 500 m.	No / Yes	Low suitability habitat present on site; not observed during appropriately timed survey.
Fritillaria viridea San Benito fritillary	CRPR 1B.2	March – May	Shrub understory, serpentine. Elevation: 200 – 1,500 m.	No / No	No suitable habitat on site; not observed during appropriately timed survey.
Hesperevax caulescens Hogwallow starfish	CRPR 4.2	March – June	Drying shrink-swell clay of vernal pools, flats, and steep slopes; sometimes on serpentine. Elevation: < 500 m.	No / No	No suitable habitat on site; not observed during appropriately timed survey.
Horkelia cuneata var. *puberula* Mesa horkelia	CRPR 1B.1	March – July	Dry, sandy, coastal chaparral. Elevation: 70 – 870 m.	No / No	No suitable habitat on site; not observed during appropriately timed survey.
Horkelia cuneata var. *sericea* Kellogg's horkelia	CRPR 1B.1	April – August	Old dunes, coastal sand hills. Elevation: < 200 m.	No / No	No suitable habitat on site; not observed during appropriately timed survey.
Juncus luciensis Santa Lucia dwarf rush	CRPR 1B.2	April – August	Wet, sandy soils of seeps, meadows, vernal pools, streams, roadsides. Elevation: 300 – 1,900 m.	No / Yes	Low suitability habitat present within ephemeral drainage on site; not observed during appropriately timed survey.
Layia jonesii Jones' layia	CRPR 1B.2	March – May	Open serpentine or clayey slopes. Elevation: < 300 m.	No / No	No suitable habitat on site; not observed during appropriately timed survey.
Lepidium jaredii Jared's pepper grass	CRPR 1B.2	March – April	Alkali bottoms, slopes, washes, dry hillsides, in vertic clay, acidic, gypsiferous soil. Elevation: 500 – 700 m.	No / No	No suitable habitat or elevation range on site; not observed during May survey.
Malacothamnus jonesii Jones' bush-mallow	CRPR 4.3	May – July	Open chaparral in foothill woodland. Elevation: 250 – 830 m.	No / Yes	Low suitability habitat present on site; not observed during appropriately timed survey.

BOTANICAL SPECIES					
Scientific/Common Name[1]	**Listing Status[2]**	**Blooming Period[3]**	**Habitat Type[3]**	**Observed/ Habitat Present?[4]**	**Comments**
Malacothamnus palmeri var. *involucratus* Carmel Valley bush-mallow	CRPR 1B.2	May – July	Valleys, chaparral. Elevation: 30 – 800 m.	No / Yes	Low suitability habitat present on site; not observed during appropriately timed survey.
Malacothamnus palmeri var. *palmeri* Santa Lucia bush-mallow	CRPR 1B.2	May – July	Interior valleys, foothills; chaparral. Elevation: 30 – 800 m.	No / Yes	Low suitability habitat present on site; not observed during appropriately timed survey.
Meconella oregana Oregon meconella	CRPR 1B.1	March – May	Shaded canyons. Elevation: < 1,000 m.	No / No	No suitable habitat or known range on site; not observed during appropriately timed survey.
Monardella palmeri Palmer's monardella	CRPR 1B.2	June – August	Chaparral, forest, on serpentine. Elevation: 200 – 800 m.	No / No	No suitable habitat on site; not observed during appropriately timed survey.
Monolopia gracilens Woodland woollythreads	CRPR 1B.2	March – July	Serpentine grassland, open chaparral, oak woodland. Elevation: 100 – 1,200 m.	No / No	No suitable habitat on site; not observed during appropriately timed survey.
Navarretia fossalis Spreading navarretia	Fed: Threatened CRPR 1B.1	April – June	Vernal pools, ditches. Elevation: 30 – 1,300 m.	No / No	No suitable habitat on site; not observed during appropriately timed survey.
Navarretia nigelliformis subsp. *radians* Shining navarretia	CRPR 1B.2	May – July	Vernal pools, clay depressions. Elevation: 150 – 1,000 m.	No / No	No suitable habitat on site; not observed during appropriately timed survey.
Nemacladus secundiflorus var. *secundiflorus* Large-flowered nemacladus	CRPR 4.3	April – May	Dry, gravelly slopes. Elevation: 200 – 2,000 m.	No / No	No suitable habitat on site; not observed during appropriately timed survey.
Plagiobothrys uncinatus Hooked popcornflower	CRPR 1B.2	April – May	Chaparral, canyon sides, and rocky outcrops; ± fire follower. Elevation: 300 – 600 m.	No / No	No suitable habitat on site; not observed during appropriately timed survey.
Senecio aphanactis Chaparral ragwort	CRPR 2B.2	February – May	Dry, open, rocky areas and alkaline flats. Elevation: 10 – 550 m.	No / No	No suitable habitat on site; not observed during appropriately timed survey.

BOTANICAL SPECIES					
Scientific/Common Name[1]	**Listing Status[2]**	**Blooming Period[3]**	**Habitat Type[3]**	**Observed/ Habitat Present?[4]**	**Comments**
Senecio astephanus San Gabriel Ragwort	CRPR 4.3	April – June	Steep rocky slopes in chaparral/coastal-sage scrub and oak woodland. Elevation: 400 – 1,500 m.	No / No	No suitable habitat on site; not observed during appropriately timed survey.
Sidalcea hickmanii subsp. *anomala* Cuesta Pass checkerbloom	State: Rare CRPR 1B.2	May – June	Closed-cone conifer forest, generally serpentine. Elevation: 600 – 800 m.	No / No	No suitable habitat on site; not observed during appropriately timed survey.
Suaeda californica California seablite	Fed: Endangered CRPR 1B.1	July – October	Margins of coastal salt marshes. Elevation: < 5 m.	No / No	No suitable habitat on site; not observed during spring survey.

[1]List of regionally-occurring special-status species acquired from CNDDB (CDFW, 2018), CCH (2018), and CNPS Rare and Endangered Plant Inventory (CNPS, 2018), and local expert knowledge. This list includes all vascular plants included in these databases; sensitive and rare lichens were excluded.

[2]Listing status obtained from CNPS Rare and Endangered Plant Inventory (CNPS, 2018).

[3]Blooming period and habitat type obtained from Jepson eFlora (2018) and occasionally supplemented with information provided by CNPS (Jepson eFlora, 2018; CNPS, 2018).

[4]Species observed during field surveys indicated with **bold** font; species determined to have suitable habitat present on the site, even marginally suitable habitat, indicated with gray highlight. Species highlighted gray are discussed further in the report.

WILDLIFE SPECIES					
Scientific/Common Name[1]	**Listing Status[1]**	**Nesting/ Breeding Period[2]**	**Habitat Type[2]**	**Observed/ Habitat Present?[3]**	**Comments / Potential for Occurrence**
Actinemys pallida Southwestern pond turtle	State: CSC	April – August	Riparian areas such as ponds, lakes, rivers, streams, creeks, marshes, and irrigation ditches with either a rocky or muddy bottom. Prefers shallow pools with logs or rocks for basking. Can enter brackish or even seawater.	No / No	No suitable habitat within survey area. Drainages are highly intermittent and lack sufficient pool habitat and/or basking features. Not observed during surveys.
Agelaius tricolor Tricolored blackbird	State: CSC	February – August	Needs nest sites near open, fresh water, protected habitat (such as cattails or tall rushes), and suitable feeding areas (pastures, rice fields, grassland, etc.).	No / No	No suitable nesting habitat within survey area; not observed during surveys.
Ammodramus savannarum Grasshopper sparrow	State: CSC	February – August	Open grasslands and agricultural fields, nesting occurs on the ground.	No / Yes	Suitable habitat present in grassland within survey area; not observed during surveys.
Anniella pulchra Northern California legless lizard	State: CSC	March – November	Sandy or loose loamy soils under coastal scrub or oak trees. Soil moisture essential.	No / Yes	Suitable habitat present in oak woodland within survey area; not observed during surveys.
Antrozous pallidus Pallid bat	State: CSC	October – February	Deserts, grasslands, shrublands, woodlands and forests. Most common in open, dry habitats with rocky areas for roosting. May roost in old buildings and bridges.	No / Yes	Suitable foraging and marginally suitable roosting habitat within survey area; not observed during surveys.
Aquila chrysaetos Golden eagle	State: Fully Protected	January – August	Open country in prairies, tundra, open coniferous forest, and barren areas, especially in hilly or mountainous regions. Nests in large, prominent trees in wooded areas and on cliff ledges.	No / Yes	Suitable nesting habitat within in vicinity; may be seen foraging in the area. Not observed during surveys.

WILDLIFE SPECIES					
Scientific/Common Name[1]	**Listing Status[1]**	**Nesting/ Breeding Period[2]**	**Habitat Type[2]**	**Observed/ Habitat Present?[3]**	**Comments / Potential for Occurrence**
Ardea herodias Great blue heron	State: Sensitive	March – August	Saltwater and freshwater marshes, sloughs, riverbanks, ponds and lakes. May also forage in grasslands and agricultural fields. Nests high in trees or other raised locations.	No / No	No suitable nesting or foraging habitat within survey area; not observed during surveys.
Arizona elegans occidentalis California glossy snake	State: CSC	June – July	Arid scrub, rocky washes, grasslands, chaparral. Prefers microhabitats of open areas and areas with loose soil for easy burrowing.	No / Yes	Suitable habitat present within survey area; not observed during surveys.
Athene cunicularia Western burrowing owl	State: CSC	March – July	Open, dry grasslands, often short grasses. Rely on ground burrowing animals for terrestrial habitat.	No / Yes	Marginally suitable habitat present within grassland on site; not observed during surveys.
Batrachoseps minor Lesser slender salamander	State: CSC	Unknown	Mesic, deeply-shaded slopes with dense leaf litter of variable tree species, including coast live oak, tanbark oak, western sycamore, and poison oak, above 400 m.	No / No	Outside of known range of species within San Luis Obispo County; not observed during surveys.
Branchinecta lynchi Vernal pool fairy shrimp	Fed: Threatened	Rainy season	Vernal pools and depressions in grasslands.	No / No	No suitable habitat observed within survey area; not observed during surveys.
Buteo regalis Ferruginous hawk	State: Watch List	February – August	Variety of nesting locations including rock outcrops, trees, and ground.	No / No	Outside of nesting range; may forage or overwinter. Not observed during surveys.
Charadrius alexandrinus nivosus Western snowy plover	Fed: Threatened State: CSC	March – September	Coastal beaches, sand spits, dune-backed beaches, sparsely vegetated dunes, beaches at creek mouths, and estuaries.	No / No	Outside of known range. No suitable habitat observed within survey area; not observed during surveys.

WILDLIFE SPECIES					
Scientific/Common Name[1]	**Listing Status[1]**	**Nesting/ Breeding Period[2]**	**Habitat Type[2]**	**Observed/ Habitat Present?[3]**	**Comments / Potential for Occurrence**
Cicindela hirticollis gravida Sandy beach tiger beetle	State: Special Animal	Unknown	Found in moist sand near the ocean, for example in swales behind dunes or upper beaches beyond normal high tides. Adjacent to non-brackish water near the coast from San Francisco to northern Mexico. Clean, dry light colored sand in the upper zone.	No / No	Outside of known range. No suitable habitat observed within survey area; not observed during surveys.
Coelus globosus Globose dune beetle	State: Special Animal	Unknown	Occupies coastal dunes. Lives in tunnels beneath and sand and relies on native vegetation for food.	No / No	Outside of known range. No suitable habitat observed within survey area; not observed during surveys.
Corynorhinus townsendii Townsend's big-eared bat	State: CSC	November – May	Mines, tunnels, buildings, human made structures. May use different day and night roosts. Prefers mesic habitats. Extremely sensitive to human disturbance.	No / No	No suitable roosting habitat on site; may forage through project area. Not observed during surveys.
Danaus plexippus Monarch butterfly	State: Special Animal	Spring	Relies on milkweed and protected stands of trees for roosting, usually blue gum eucalyptus. Found in fields, meadows, weedy areas, marshes, and along roadsides.	No / No	No suitable roosting habitat on site; may forage through project area. Not observed during surveys.
Elanus leucurus White-tailed kite	State: Fully Protected	March – August	Savanna, open woodlands, marshes, desert, grassland. Prefer partially cleared fields such as ranches and cultivated fields. They build nests on top of old ones of other species in trees.	No / Yes	Suitable nesting habitat within the survey area; may forage through project area. Not observed during surveys.

WILDLIFE SPECIES					
Scientific/Common Name[1]	**Listing Status[1]**	**Nesting/ Breeding Period[2]**	**Habitat Type[2]**	**Observed/ Habitat Present?[3]**	**Comments / Potential for Occurrence**
Eucyclogobius newberryi Tidewater goby	Fed: Endangered State: CSC	Year – round (April – May)	Found in shallow water lagoons and lower stream reaches, they need fairly still but not stagnant water and high oxygen levels. Can tolerate an array of different conditions depending on seasonal changes.	No / No	Outside of known range. No suitable habitat observed within survey area; not observed during surveys.
Helminthoglypta walkeriana Morro shoulderband snail	Fed: Endangered	October – April	Found in association with woody coastal dune scrub and within iceplant and veldt grass habitat. Current range limited to south of Morro Bay, west of Los Osos Creek, and north of Hazard Canyon.	No / No	Outside of known range. No suitable habitat observed within survey area; not observed during surveys.
Neotoma macrotis luciana Monterey dusky-footed woodrat	State: CSC	February – November	Dense chaparral; hardwood, conifer, and mixed forests; and riparian woodlands. In most instances nests are constructed in inaccessible areas, such as thorny thickets, poison oak patches, or nettles.	No / No	Lack of vegetative understory on site. No nests observed during surveys.
Oncorhynchus mykiss irideus Steelhead – south/ central California coast DPS	Fed: Threatened State: CSC	February – April	Federal listing refers to runs in coastal basins from Pajaro River south to, but not including, the Santa Maria River.	No / No	No suitable habitat within survey area; not observed during surveys.
Perognathus inornatus psammophilus Salinas pocket mouse	State: CSC	March – July	Dry, open, grassy or weedy ground, and arid annual grasslands, savanna, and desert-shrub associations with sandy washes or finely textured soil. Rarely documented in blue oak savannah.	No / No	No suitable habitat within survey area; not observed during surveys.

WILDLIFE SPECIES					
Scientific/Common Name[1]	**Listing Status[1]**	**Nesting/ Breeding Period[2]**	**Habitat Type[2]**	**Observed/ Habitat Present?[3]**	**Comments / Potential for Occurrence**
Phrynosoma blainvillii Blainville's horned lizard	State: CSC	May – September	Frequents a wide variety of habitats, most common in lowlands along sandy washes with scattered low bushes.	No / No	No suitable habitat within the survey area; not observed during surveys.
Plebejus icarioides moroensis Morro Bay blue butterfly	State: Special Animal	March – July	Found on the immediate coast of San Luis Obispo and Santa Barbara Counties. Silver dune lupine (host plant).	No / No	Outside of known range. No suitable habitat within survey area; not observed during surveys.
Polyphylla nubila Atascadero June beetle	State: Special Animal	Early Summer – June	Known only from sand dunes in Atascadero and San Luis Obispo.	No / No	Outside of known range. No suitable habitat within survey area; not observed during surveys.
Progne subis Purple martin	State: CSC	April – August	Woodlands and low-elevation coniferous forest of Douglas-fir, ponderosa pine, and Monterey pine provide cover. Occasionally in residential areas.	No / No	No suitable habitat within survey area; not observed during surveys.
Pyrgulopsis taylori San Luis Obispo pyrg	State: Special Animal	N/A	Freshwater habitats in San Luis Obispo County.	No / No	Outside of known range. No suitable habitat within survey area; not observed during surveys.
Rana boylii Foothill yellow-legged frog	State: Candidate, CSC	April – July	Streams and rivers with rocky substrate and open, sunny banks, in forest, chaparral, and woodlands. Sometimes found in isolated pools.	No / No	No suitable habitat within survey area; not observed during surveys.
Rana draytonii California red-legged frog	Fed: Threatened State: CSC	January – March	Lowlands and foothills in or near sources of deep water with dense, shrubby or emergent riparian vegetation.	No / No	No suitable habitat within survey area; not observed during surveys.
Spea hammondii Western spadefoot	State: CSC	January – August	Seasonal/vernal pools in coastal scrub, grassland, chaparral, woodland habitat, and open areas with sandy or gravelly soils.	No / Yes	Depending on hydroperiod, suitable pools may occur within drainage on site; not observed during surveys.

WILDLIFE SPECIES					
Scientific/Common Name[1]	**Listing Status[1]**	**Nesting/ Breeding Period[2]**	**Habitat Type[2]**	**Observed/ Habitat Present?[3]**	**Comments / Potential for Occurrence**
Taricha torosa Coast range newt	State: CSC	December – May	Slow moving streams, ponds, and lakes with surrounding evergreen/ oak forests along coast.	No / No	No suitable habitat within survey area; not observed during surveys.
Taxidea taxus American badger	State: CSC	February – May	Needs friable soils in open ground with abundant food source such as California ground squirrels.	No / Yes	Suitable habitat is present within grassland in survey area; not observed during surveys.
Vireo bellii pusillus Least Bell's vireo	Fed: Endangered State: Endangered	March – September	Dense, shrubby vegetation in brushy fields, second-growth forest, woodland, riparian, chaparral, and mesquite brush lands; often near water in arid regions. Nests suspended from branches of small trees or shrubs.	No / No	No suitable habitat within survey area; not observed during surveys.
Vulpes macrotis mutica San Joaquin kit fox	Fed: Endangered State: Threatened	December – July	Open, annual grasslands with loose sandy soil.	No / Yes	Marginally suitable habitat on site; not observed during surveys. Not expected to occur due to lack of known populations in the vicinity.

[1]List of regionally-occurring special-status species and listing status acquired from CNDDB (CNDDB 2019) and local expert knowledge. Crotch bumblebee (*Bombus crotchii*) and Lompoc grasshopper (*Trimerotropis occulens*) were omitted from this list due to a scarcity of available biological information. Further research is necessary within the home ranges of these species to identify specific conservation needs and appropriate protection measures.

[2]Life history information obtained from multiple sources, including Cornell Lab of Ornithology Online (Cornell 2019), CaliforniaHerps.com (Nafis 2019), and USFWS Environmental Conservation Online System (ECOS) (USFWS 2019c).

[3]Species observed during field surveys indicated with **bold** font; species determined to have suitable habitat present on the site, even marginally suitable habitat, indicated with gray highlight. Species highlighted gray are discussed further in the report.

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APPENDIX D – Botanical and Wildlife Species Observed

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Caelesta Winery and Tasting Room Project
List of Botanical Species Observed May 17, 2019

Family	Scientific Name	Common Name	Origin
Anacardiaceae, Sumac Family	*Toxicodendron diversilobum*	Western poison oak	Native
Apiaceae, Carrot Family	*Bowlesia incana*	Bowlesia	Native
	Daucus pusillus	Wild carrot	Native
	Lomatium caruifolium	Caraway leaved lomatium	Native
	Sanicula arguta	Sharp toothed snakeroot	Native
	Sanicula crassicaulis	Pacific sanicle	Native
	Torilis arvensis	Tall sock-destroyer	Naturalized
	Torilis nodosa	Short sock-destroyer	Naturalized
Apocynaceae, Dogbane Family	*Asclepias eriocarpa*	Kotolo	Native
	Asclepias fascicularis	Narrow-leaf milkweed	Native
Asteraceae, Sunflower Family	*Achillea millefolium*	Yarrow	Native
	Achyrachaena mollis	Blow wives	Native
	Agoseris heterophylla	Mountain dandelion	Native
	Anthemis cotula	Mayweed	Naturalized
	Carduus pycnocephalus	Italian thistle	Naturalized
	Centaurea melitensis	Maltese star-thistle	Naturalized
	Centaurea solstitialis	Yellow star-thistle	Naturalized
	Corethrogyne filaginifolia	Common sandaster	Native
	Deinandra cf[1] *pentactis*	Salinas River tarweed	Native
	Erigeron foliosus	Leafy fleabane	Native
	Eriophyllum confertiflorum	Golden-yarrow	Native
	Gnaphalium palustre	Lowland cudweed	Native
	Lactuca serriola	Prickly lettuce	Naturalized
	Lessingia cf[1] *pectinata*	Valley lessingia	Native
	Madia exigua	Small tarweed	Native
	Madia gracilis	Gumweed	Native
	Micropus californicus	Q-tips	Native
	Silybum marianum	Milk thistle	Naturalized
	Wyethia helenioides	Gray mule ears	Native
Boraginaceae, Borage Family	*Amsinckia intermedia*	Common fiddleneck	Native
	Amsinckia tessellata	Devil's lettuce	Native
	Plagiobothrys canescens	Valley popcornflower	Native
	Plagiobothrys nothofulvus	Rusty popcornflower	Native
Brassicaceae, Mustard Family	*Brassica nigra*	Black mustard	Naturalized
	Capsella bursa-pastoris	Shepherd's purse	Naturalized

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Family	Scientific Name	Common Name	Origin
Brassicaceae, Mustard Family (cont.)	*Hirschfeldia incana*	Mediterranean hoary mustard	Naturalized
	Sisymbrium orientale	Indian hedge mustard	Naturalized
Caprifoliaceae, Honeysuckle Family	*Lonicera* sp.	Honeysuckle	Native
	Symphoricarpos mollis	Creeping snowberry	Native
Caryophyllaceae, Pink Family	*Cerastium glomeratum*	Sticky mouse-ear chickweed	Naturalized
	Stellaria media	Common chickweed	Naturalized
Chenopodiaceae, Goosefoot Family	*Chenopodium californicum*	California goosefoot	Native
Convolvulaceae, Morning-glory Family	*Calystegia collina* subsp. *venusta*	South Coast Range morning-glory	Native **CRPR 4.3**[2]
Ericaceae, Heath Family	*Arctostaphylos glauca*	Big berry manzanita	Native
Euphorbiaceae, Spurge Family	*Croton setiger*	Turkey-mullein	Native
Fabaceae, Legume Family	*Acmispon americanus* var. *americanus*	American bird's foot trefoil	Native
	Acmispon wrangelianus	Chilean trefoil	Native
	Astragalus gambelianus	Little blue loco	Native
	Astragalus macrodon	Salinas milkvetch	Native **CRPR 4.3**[2]
	Lupinus bicolor	Miniature lupine	Native
	Lupinus microcarpus	Chick lupine	Native
	Lupinus nanus	Valley sky lupine	Native
	Medicago polymorpha	California burclover	Naturalized
	Melilotus indicus	Sourclover	Naturalized
	Trifolium ciliolatum	Foothill clover	Native
	Trifolium hirtum	Rose clover	Naturalized
	Trifolium willdenovii	Tomcat clover	Native
	Vicia villosa	Hairy vetch	Naturalized
Fagaceae, Oak Family	*Quercus agrifolia*	Coast live oak	Native
	Quercus douglasii	Blue oak	Native
	Quercus lobata	Valley oak	Native
Geraniaceae, Geranium Family	*Erodium botrys*	Broad leaf filaree	Naturalized
	Erodium cicutarium	Redstem filaree	Naturalized
	Geranium molle	Crane's bill geranium	Naturalized

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Family	Scientific Name	Common Name	Origin
Grossulariaceae, Gooseberry Family	*Ribes quercetorum*	Oakwoods gooseberry	Native
Lamiaceae, Mint Family	*Lamium amplexicaule*	Henbit	Naturalized
	Marrubium vulgare	White horehound	Naturalized
Liliaceae, Lily Family	*Calochortus splendens*	Splendid mariposa lily	Native
Lythraceae, Loosestrife Family	*Lythrum hyssopifolia*	Hyssop loosestrife	Naturalized
Malvaceae, Mallow Family	*Malva parviflora*	Cheeseweed	Naturalized
Montiaceae, Miner's Lettuce Family	*Claytonia perfoliata*	Miner's lettuce	Native
Myrsinaceae, Myrsine Family	*Lysimachia arvensis*	Scarlet pimpernel	Naturalized
Onagraceae, Evening-primrose Family	*Clarkia affinis*	Chaparral fairyfan	Native
	Clarkia cylindrica	Speckled clarkia	Native
	Clarkia purpurea subsp. *quadrivulnera*	Four-spot	Native
	Clarkia unguiculata	Elegant clarkia	Native
	Epilobium canum	California fuchsia	Native
Papaveraceae, Poppy Family	*Eschscholzia californica*	California poppy	Native
Plantaginaceae, Plantain Family	*Plantago erecta*	California plantain	Native
	Veronica peregrina subsp. *xalapensis*	Purslane speedwell	Native
Poaceae, Grass Family	*Avena barbata*	Slender wild oat	Naturalized
	Avena fatua	Wild oat	Naturalized
	Bromus catharticus	Rescue grass	Naturalized
	Bromus diandrus	Ripgut grass	Naturalized
	Bromus hordeaceus	Soft chess	Naturalized
	Bromus madritensis subsp. *rubens*	Red brome	Naturalized
	Elymus triticoides	Beardless wild-rye	Native
	Festuca microstachys	Small fescue	Native
	Festuca myuros	Rattail sixweeks grass	Naturalized
	Festuca perennis	Rye grass	Naturalized
	Hordeum murinum	Wall barley	Naturalized
	Polypogon monspeliensis	Annual beard grass	Naturalized
	Stipa pulchra	Purple needle grass	Native

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Family	Scientific Name	Common Name	Origin
Polygonaceae, Buckwheat Family	*Polygonum aviculare*	Knotweed	Naturalized
	Rumex conglomeratus	Green dock	Naturalized
	Rumex crispus	Curly dock	Naturalized
Ranunculaceae, Buttercup Family	*Delphinium gypsophilum*	Gypsum-loving larkspur	Native
Rhamnaceae, Buckthorn Family	*Rhamnus ilicifolia*	Hollyleaf redberry	Native
Rosaceae, Rose Family	*Prunus ilicifolia* subsp. *ilicifolia*	Holly-leafed cherry	Native
Rubiaceae, Madder Family	*Galium andrewsii*	Phlox-leaved bedstraw	Native
	Galium aparine	Goose grass	Native
	Galium parisiense	Wall bedstraw	Naturalized
Scrophulariaceae, Figwort Family	*Verbascum virgatum*	Wand mullein	Naturalized
Solanaceae, Nightshade Family	*Solanum xanti*	Nightshade	Native
Scrophulariaceae, Figwort Family	*Verbascum virgatum*	Wand mullein	Naturalized
Themidaceae, Brodiaea Family	*Bloomeria crocea*	Common goldenstar	Native
	Dichelostemma capitatum	Blue dicks	Native
Valerianaceae, Valerian Family	*Plectritis congesta*	Sea blush	Native
Verbenaceae, Vervain Family	*Verbena lasiostachys*	Western vervain	Native
Violaceae, Violet Family	*Viola pedunculata*	Johnny-jump-up	Native

[1]cf (=conforms to): indicates provisional species determination based on the observed pheno-phase, but in the absence of diagnostic features (e.g., desiccated or undeveloped reproductive structures).

[2]CRPR = California Rare Plant Rank; taxa included on the CRPR list are assigned a listing status based on the degree of rarity (Lists 1A through 4) and threat level (0.1, 0.2, and 0.3), as follows (CNPS 2019):

Rarity Ranks:

- **List 1A:** presumed extirpated in California, and rare or extinct elsewhere
- **List 1B:** rare, threatened, or endangered in California and elsewhere
- **List 2A:** presumed extirpated in California, but more common elsewhere
- **List 2B:** rare, threatened, or endangered in California, but more common elsewhere
- **List 3:** review list of plants about which more information is needed
- **List 4:** watch list of plants with limited distribution

Threat Ranks:

- **0.1:** seriously threatened in California (> 80% threatened / high degree and immediacy of threat)
- **0.2:** moderately threatened in California (20-80% threatened / moderate degree and immediacy of threat)
- **0.3:** not very threatened in California (< 20% threatened / low degree and immediacy or no current threats known)

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Caelesta Winery and Tasting Room Project

List of Wildlife Species Observed on May 17, 2019

Family	Scientific Name	Common Name	*Listing Status Federal/State
Birds	*Aphelocoma californica*	California scrub-jay	--
	Buteo jamaicensis	Red-tailed hawk	--
	Calypte anna	Anna's hummingbird	--
	Carpodacus mexicanus	House finch	--
	Cathartes aura	Turkey vulture	--
	Chondestes grammacus	Lark sparrow	--
	Corvus brachyrhynchos	American crow	--
	Corvus corax	Common raven	--
	Melanerpes formicivorus	Acorn woodpecker	--
	Meleagris gallopavo	Wild turkey	Naturalized
	Myiarchus cinerascens	Ash-throated flycatcher	--
	Phainopepla nitens	Phainopepla	--
	Psaltriparus minimus	Bushtit	--
	Sitta carolinensis	White-breasted nuthatch	--
	Spinus psaltria	Lesser goldfinch	--
	Sturnus vulgaris	European starling	Not native
	Tachycineta thalassina	Violet-green swallow	--
	Thryomanes bewickii	Bewick's wren	--
	Zenaida macroura	Mourning dove	--
Mammals	*Canis latrans*	Coyote	--
	Odocoileus hemionus	Mule deer	--
	Procyon lotor	Racoon	--
	Spermophilus beecheyi	California ground squirrel	--
	Thomomys bottae	Botta's pocket gopher	--
Reptiles	*Sceloporus occidentalis*	Western fence lizard	--
Amphibians	*Pseudacris sierra*	Sierran treefrog	--
Invertebrates	*Vanessa cardui*	Painted lady	--

*California Department of Fish and Wildlife Listing Status:

- Fully Protected (FP)
- California Species of Special Concern (CSC)

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APPENDIX E – Representative Site Photographs

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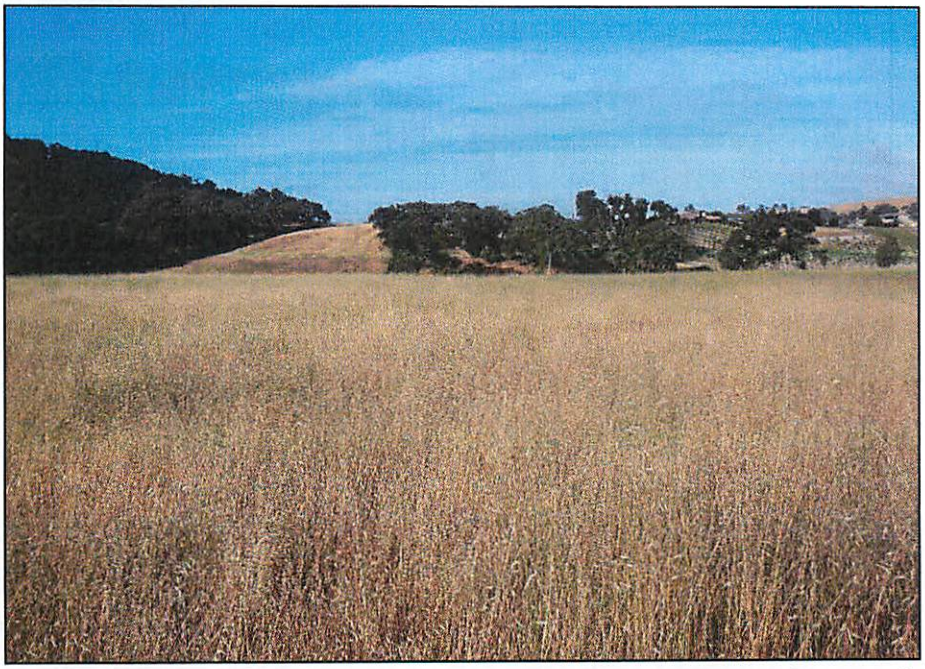

Photo 1. View southwest of grassland habitat, where new winery and tasting facility is proposed (05-17-19).

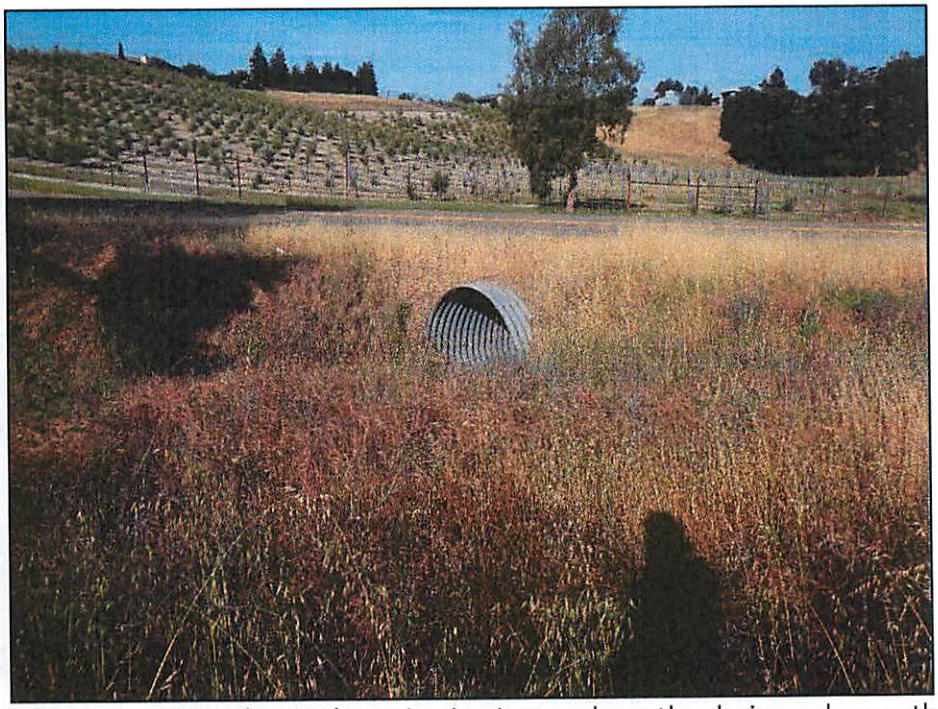

Photo 2. View west of the culvert inlet at Lupine Lane, where the drainage leaves the project site (05-17-19).



Photo 3. View southeast across the open grassland, toward the blue oak woodland habitat on the slope south of the proposed facility (05-17-19).



Photo 4. View east along the ephemeral drainage (05-17-19).



Photo 5. View west along the ephemeral drainage (05-17-19).



Photo 6. View north of the blue oak woodland habitat on the slope, where the water supply line is proposed to be installed via HDD (05-17-19).



Photo 7. Salinas milk-vetch in flower, located near the top of the slope in association with blue oak woodland habitat on site (05-17-19).



Photo 8. South Coast Range morning-glory in flower, located just north of the ephemeral drainage and just south of the proposed tasting room (05-17-19).

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APPENDIX F – California Native Species Field Survey Forms

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Environmental Consulting LLC

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CNDDB Online Field Survey Form Report

California Natural Diversity Database
Department of Fish and Wildlife
1416 9th Street, Suite 1266
Sacramento, CA 95814
Fax: 916.324.0475
cnddb@wildlife.ca.gov
www.dfg.ca.gov/biogeodata/cnddb/

This data has been reported to the CNDDB, but may not have been evaluated by the CNDDB staff

Source code NEL19F0010
Quad code 3512056
Occ. no.
EO index no.
Map index no.

Scientific name: *Astragalus macrodon*

Common name: Salinas milk-vetch

Date of field work (mm-dd-yyyy): 05-17-2019

Comment about field work date(s):

OBSERVER INFORMATION

Observer: Kristen M. Nelson

Affiliation: Terra Verde Environmental Consulting

Address: 3765 South Higuera Street, Suite 102

Email: knelson@terraverdeweb.com

Phone: (702) 596-5038

Other observers:

DETERMINATION

Keyed in: TJM2

Compared w/ specimen at:

Compared w/ image in:

By another person:

Other:

Identification explanation:

Identification confidence: Confident

Species found: Yes **If not found, why not?**

Level of survey effort: Pedestrian surveys, focused on area of proposed development.

Total number of individuals: 15

Collection? No **Collection number:**

Museum/Herbarium:

PLANT INFORMATION

Phenology:

70 %	30 %	0 %
vegetative	flowering	fruiting

SITE INFORMATION

Habitat description: Occurring in the open understory of blue oak woodland.

Slope: 30-40 degree slope Land owner/manager: Private

Aspect: Northwest

Site condition + population viability: Good

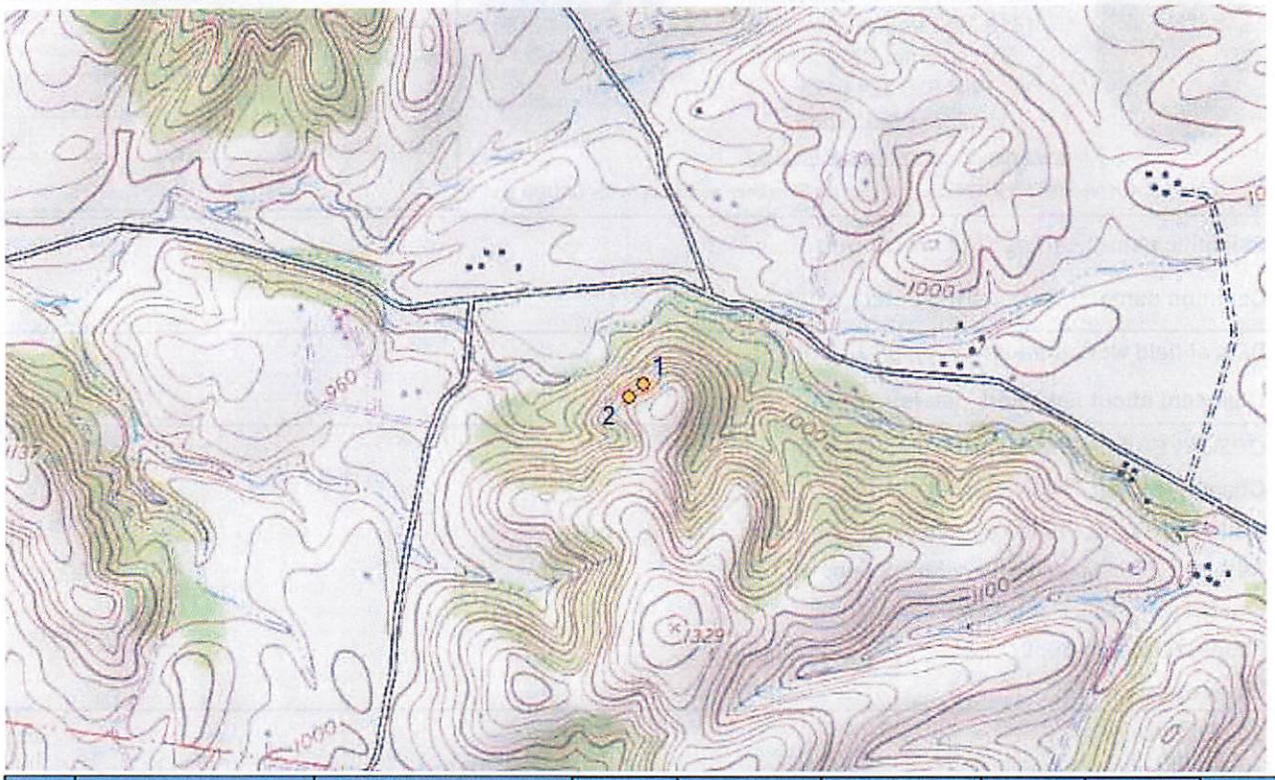
Immediate & surrounding land use: Undeveloped parcel surrounded by vineyard and ranchland properties.

Visible disturbances: None

Threats: Development, competition from invasive species

General comments:

MAP INFORMATION



ID	County	24K Quadrangle	Elev. (ft)	Latitude NAD83	Longitude NAD83	UTM E NAD83	UTM N NAD83	UTM Zone
	San Luis Obispo	Templeton	1067	35.56100	-120.64559	713386	3937809	10
1	**Public Land Survey**	**Feature Comment**						
	M T27S R12E 23							

ID	County	24K Quadrangle	Elev. (ft)	Latitude NAD83	Longitude NAD83	UTM E NAD83	UTM N NAD83	UTM Zone
	San Luis Obispo	Templeton	1070	35.56075	-120.64594	713355	3937781	10
2	**Public Land Survey**	**Feature Comment**						
	M T27S R12E 23							

The mapped feature is accurate within: 5 m

Source of mapped feature: GPS, sub-meter accuracy

Mapping notes: Several individuals scattered on upper portion of wooded slope.

Location/directions comments: Private property near the intersection of El Pomar Drive and Lupine Lane.

Attachment(s):

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Source code NEL19F0009
Quad code 3512056
Occ. no.
EO index no.
Map index no.

Scientific name: *Calystegia collina ssp. venusta*

Common name: South Coast Range morning-glory

Date of field work (mm-dd-yyyy): 05-17-2019

Comment about field work date(s):

OBSERVER INFORMATION

Observer: Kristen M. Nelson

Affiliation: Terra Verde Environmental Consulting

Address: 3765 South Higuera Street, Suite 102

Email: knelson@terraverdeweb.com

Phone: (702) 596-5038

Other observers:

DETERMINATION

Keyed in: TJM2

Compared w/ specimen at:

Compared w/ image in:

By another person:

Other:

Identification explanation:

Identification confidence: Confident

Species found: Yes **If not found, why not?**

Level of survey effort: Pedestrian surveys, focused on proposed development area.

Total number of individuals: 2

Collection? **Collection number:**

Museum/Herbarium:

PLANT INFORMATION

Phenology:

vegetative	flowering	fruiting
0 %	100 %	0 %

SITE INFORMATION

Habitat description: Growing in annual grassland habitat, near the edge of an ephemeral drainage and oak woodland habitat.

Slope: 1-3 degree slope

Land owner/manager: Private

Aspect: South

Site condition + population viability: Good

Immediate & surrounding land use: Undeveloped parcel, surrounded by vineyard and ranchland properties.

Visible disturbances: None

Threats: Competition from invasive species, development

General comments:

MAP INFORMATION



ID	County	24K Quadrangle	Elev. (ft)	Latitude NAD83	Longitude NAD83	UTM E NAD83	UTM N NAD83	UTM Zone
	San Luis Obispo	Templeton	909	35.56123	-120.64763	713201	3937830	10
1	**Public Land Survey**	**Feature Comment**						
	M T27S R12E 23							

The mapped feature is accurate within: 5 m

Source of mapped feature: GPS, sub-meter accuracy

Mapping notes:

Location/directions comments: Near the intersection of El Pomar Drive and Lupine Lane on private property.

Attachment(s):