BIOLOGICAL RESOURCES REPORT

Vineyard House Winery and Driveway Expansion Project, Napa County, California

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LIST OF ACRONYMS AND ABBREVIATIONS

CDFG/CDFW	California Department of Fish and Game/Wildlife
CEQA	California Environmental Quality Act
CESA	California Endangered Species Act
CFGC	California Fish and Game Code
CNDDB	California Natural Diversity Database
CNPS	California Native Plant Society
ESA	Federal Endangered Species Act
MBTA	Migratory Bird Treaty Act
NRCS	Natural Resources Conservation Service
OHWM	Ordinary High Water Mark
RWQCB	Regional Water Quality Control Board
USACE	U.S. Army Corps of Engineers
USDA	U.S. Department of Agriculture
USFWS	U.S. Fish and Wildlife Service
WBWG	Western Bat Working Group

1.0 INTRODUCTION

On March 30th and June 3rd, 2021, Sol Ecology, Inc. (Sol Ecology) performed a biological resources survey at 1581 and 1583 Oakville Grade Road, Oakville, Napa County, California (Project Study Area, see Appendix A – Figure 1).

The purpose of the surveys was to gather information necessary to complete a review of potential biological resource impacts from development of the proposed project, under the guidelines of the California Environmental Quality Act (CEQA) for the Napa County Planning, Building, and Environmental Services Department and other applicable state and federal regulations. This report describes the results of the Project Study Area survey and assessment for the presence of sensitive biological resources protected by local, state, and federal laws and regulations. This report also contains an evaluation of potential impacts to sensitive biological resources that may occur from the proposed project and potential mitigation measures to compensate for those impacts as warranted. This report is based on information available at the time of the study and on-site conditions that were observed on the dates of the site visits.

1.1 Project Setting

The Project Study Area is located on the property located at 1581 and 1583 Oakville Grade Road, Oakville, Napa County accessed via Oakville Grade Road, off St. Helena Hwy. The approximately 0.2-acre Project Study Area is within APN 027-360-022 (Appendix A, Figure 1). The parcel is currently zoned as Agriculture Watershed (AW) and Agricultural Preserve (AP) (County of Napa 2021). The parcel is bounded by vineyard, coastal hardwood forest, stream and riparian forest, landscaped gardens, historic home site, and Oakville Grade Road. The parcels have been disturbed and used as operational vineyards since the 1990s.

1.2 Project Description

The purpose of this project is to construct a new winery with a production capacity of 20,000 square feet, and a 12,877 square-foot cave facility; and to convert the existing residence into a hospitality and winery administration building (Project). The general scope of the Project includes renovation of one existing building and the construction of a new covered crush pad and wine cave facility with cave portals, and upgrades to infrastructure as needed to support these changes. The Project includes creation of a soil spoils disposal area in existing vineyards located generally on the southern edge of the property. The soil disposal area is comprised entirely of existing vineyards and maintained upland areas dominated by non-native annual grassland vegetation with no surface waters, including wetlands nor streams being present. Minor driveway improvements, including widening, are also included in the Project. The activity will require construction of a single culverted crossing of a potentially jurisdictional ephemeral stream channel and adjacent oak woodland habitat located within Napa County 35-foot streamside setback for ephemeral streams.

Compensatory mitigation for impacts to the ephemeral stream channel and oak woodland would be provided on-site through planting and restoration-enhancement of an equivalent area. The Project includes stream and riparian enhancement activities within the stream proposed to be culverted for the cave entrance and crush pad, which would involve temporary disturbance of the stream and associated riparian habitat. A Riparian Enhancement Concept Plan showing the location and extent of the stream and riparian enhancement activities, and the proposed plant species, sizing and spacing, is provided in Appendix A. As the stream would be restored and riparian areas allowed to re-establish, there would not be a long-term loss of stream and riparian habitat. Stream and riparian enhancement activities are included in the Project to replace lost floodplain and riparian habitat functioning associated with the proposed stream crossing for the new cave entrance and crush pad. Enhancement activities are located both upstream and downstream of the proposed cave entrance and crush pad, and would produce approximately 0.19 acres of mitigation as stream and riparian enhancement. Riparian enhancement activities include laying back the right bank of the stream using a 4:1 slope to create a wider stream channel and adjacent areas for oak riparian woodland and forest plantings. All non-native plantings in the footprint of the proposed enhancement activities would be removed and replaced with new native riparian trees, shrubs and herbaceous plants in the understory. Plantings would be located along both stream banks. Typical tree plantings include Coast live oak (*Quercus agrifolia*) and California black oak (*Quercus kelloggii*); shrubs include coyote brush (*Baccharis pilularis*), snowberry (*Symphoricarpos albus* var. *laevigata*), and California rose (*Rosa californica*); and herbaceous plants include California brome (*Bromus carinatus*), rough sedge (*Carex senta*), blue wild rye (*Elymus glaucus*), and western sword fern (*Polystichum munitum*). Irrigation of the planted areas would be required, in addition to monitoring and maintenance of the enhancement areas for a period of 5 years to ensure the mitigation is successful and satisfy regulatory agency permit requirements. A total of 34 oak trees will be incorporated into the stream and riparian enhancement project to mitigate for proposed tree removals.

2.0 METHODS

On March 30th and June 3rd 2021, the Project Study Area was traversed on foot to determine the presence of (1) plant communities both sensitive and non-sensitive, (2) special status plant and wildlife species, (3) presence of essential habitat elements for any special status plant or wildlife species, and (4) the presence and extent of wetland and non-wetland waters.

2.1 Literature Review

To evaluate whether special status species or other sensitive biological resources (e.g., streams, wetlands) could occur in the Project Study Area and vicinity, Sol Ecology biologists reviewed the following:

- California Native Plant Society's (CNPS's) Inventory of Rare and Endangered Plants of California search for U.S. Geological Survey (USGS) 7.5-minute Rutherford quadrangle and eight adjacent quadrangles (CNPS 2021)
- California Natural Diversity Database (CNDDB) records search for USGS 7.5-minute Rutherford quadrangle and eight adjacent quadrangles (California Department of Fish and Wildlife [CDFW] 2021)
- U.S. Fish and Wildlife Service (USFWS) list of threatened and endangered species for the Project Study Area (IPaC) (USFWS 2021a)
- CDFG publication "California's Wildlife, Volumes I-III" (Zeiner et al. 1990)
- CDFG publication *California Bird Species of Special Concern* (Shuford and Gardali 2008)
- CDFW and University of California Press publication *California Amphibian and Reptile Species of Special Concern* (Thomson et al. 2016)
- USFWS National Wetlands Inventory, Wetlands Mapper (USFWS 2021b)
- U.S. Department of Agriculture (USDA), Natural Resources Conservation Service (NRCS), Web Soil Survey (USDA 2019)

Based on information from the above sources, Sol Ecology developed lists of special status species and natural communities of special concern that could be present in the Project vicinity (Appendix B). Figures 2 and 3 present the results of a 5-mile CNDDB record search around the study area for special status plants and wildlife (Appendix A). All biological resources are evaluated for their potential to occur within the Project Study Area in Section 3.0 of this report.

2.2 Field Survey

Sol Ecology biologists conducted biological resource surveys on March 30th and June 3rd, 2021. Field surveyor qualifications are in Appendix C. Biologists walked throughout the entire Project Study Area identifying all plant and wildlife species encountered and mapping vegetation communities. Plant species were recorded and identified to a taxonomic level sufficient to determine rarity using the second edition of the *Jepson Manual* (Baldwin et al. 2012). All plant species observed in the Project Study Area are included in Appendix D – Observed Species Table. Vegetation communities were identified using the online version of *A Manual of California*

Vegetation (CNPS 2021). Dispersal habitat, foraging habitat, refugia or estivation habitat, and breeding (or nesting habitat) were noted for wildlife species.

In cases where little information is known about species occurrences and habitat requirements, the species evaluation was based on best professional judgment of Sol Ecology biologists with experience working with the species and habitats. If a special status species was observed during the site visit, its presence is recorded and discussed.

3.0 RESULTS

3.1 Existing Conditions and General Wildlife Use

Elevations within the Project Study Area range from approximately 74 to 94 meters (243 to 310 feet) above mean sea level. The Project Study Area encompasses 2 soil map units identified by the USDA, NRCS (USDA 2019):

- **Coombs gravelly loam, 2 to 5 percent slopes, 123**: This soil map unit is well drained and occurs in terraces and alluvial fans. Soil parent material is alluvium derived from igneous rock and/or alluvium derived from sedimentary rock. Coombs gravelly loam is not rated as hydric. Minor components include Clear Lake 3%
- **Sobrante loam, 5 to 30 percent slopes, 178**: This soil map unit is well drained and occurs in hills. Soil parent material is residuum weathered from sandstone. Sobrante loam is not rated as hydric.

Vegetation communities present in the study area were classified using the online version of *A Manual of California Vegetation* (CNPS 2021). However, in some cases it is necessary to identify variants of community types or to describe non-vegetated areas that are not described in the literature. Vegetation communities were classified as non-sensitive or sensitive natural communities as defined by CEQA and other applicable laws and regulations and shown in Appendix A, Figure 2. Photographs of the study area are provided in Appendix E.

3.1.1 Non-Sensitive Natural Communities

Developed and Disturbed (Vineyard)

A portion of the Project Study Area and bordering areas within the larger parcel are developed and disturbed irrigated vineyard with access paths and gravel access roads. Vegetation observed within the study area include commercial grape varieties, non-native grasses and forbs, and some native forbs.

3.1.2 Sensitive Natural Communities

Ephemeral Stream Channel - Potential CDFW and RWQCB Jurisdiction

An ephemeral stream channel runs through the center of the Project Study Area in the footprint of the proposed crush pad and primary entrance (cave portal) leading to the cave facility. Within the Project Study Area, the ephemeral stream begins at a culvert running underneath a gravel road used for accessing the hilltop vineyard situated outside of the Project Study Area to the west. The stream is approximately 4'-wide at the upstream limits of the feature and narrows to approximately 2'-wide at its terminus, where it drains to two culverts located near the southwest corner of the existing barn building, for a total length of 292 feet within the Project Study Area (Appendix A, Figure 2).

The stream was dry during the site visits conducted by Sol Ecology. The stream is covered in rocks and is bordered by the gravel vineyard access road to the East and steep mixed oak forest to the West. There are multiple stressors in the contributing watershed, including road crossings and agricultural uses, sediment inputs, and limited riparian habitats, and the stream appears to be highly disturbed as a result. The stream is predominately unvegetated with very few geomorphological features (e.g., floodplain terraces, riffle-pools, or overhanging banks). Vegetation in and adjacent to the ephemeral stream feature appears to be regularly maintained. Furthermore, no wetlands are present within the Project Study Area.

The ephemeral stream channel is not considered to be federally jurisdictional as a Water of the U.S., because it does not convey a relatively permanent water and is not located adjacent to a traditionally navigable water. The ephemeral stream channel is likely considered a Water of the State under RWQCB jurisdiction per the Porter-Cologne Water Quality Control Act, and under CDFW jurisdiction per the CFGC, including the beds and banks of a stream channel and adjacent riparian forest. Any unavoidable filling of the ephemeral stream channel or alterations to the beds and banks of the ephemeral stream and its adjacent riparian forest would need to be authorized by CDFW and San Francisco RWQCB.

Coast Live Oak Woodland (*Quercus agrifolia* Woodland Alliance)

Coast live oak woodland is known from the outer and inner Coast Ranges, Transverse Ranges, and southern coast from northern Mendocino County south to San Diego County. This vegetation community is typically located on terraces, canyon bottoms, slopes, and flats underlain by deep, well-drained sandy or loam substrates with high organic content. Approximately 0.27 acre of disturbed coast live oak woodland is present within the Project Study Area and occurs on the steep graded hillside where the winery cave facility and entrances are proposed (Appendix A, Figure 2). This vegetation alliance also occurs at the edge of the proposed driveway improvements leading to the winery facility. This vegetation alliance is dominated by sparse coast live oak trees (*Quercus agrifolia)*, interspersed with some black oak (*Quercus kelloggii*), Pacific madrone (*Arbutus menziesii*), and California bay (*Umbellularia californica*). The understory is landscaped and disturbed, largely cleared of vegetation aside from a limited number of planted ornamentals and non-native grasses and forbs.

The upland edge of the ephemeral stream channel is sparsely vegetated with mature coast live oak (*Quercus agrifolia*) and black oak (*Quercus kelloggii*) along the banks, with minor's lettuce (*Claytonia perfoliate*), hairy bittercress (*Cardamine hirsute*), bedstraw (*Gallium aparine),* common groundsel (*Senecio vulgaris*), and numerous planted non-native and native ornamental perennials as the understory growing along the bank and extending through the canopy.

3.2 Special Status Plants

Special status plant species include plant species that have been formally listed, are proposed as endangered or threatened, or are candidates for such listing under the Federal Endangered Species Act (ESA) or California Endangered Species Act (CESA). These acts afford protection to both listed species and those that are formal candidates for listing. Plant species on CNPS'

Inventory of Rare and Endangered Plants of California with California Rare Plant Ranks of 1 and 2 are also considered special status plant species and must be considered under CEQA. Further, California Rare Plant Ranks 3 and 4 are evaluated within this report to ensure locally important plant species are evaluated for impact significance.

Based upon a review of the resources and databases given in Section 2.1, 88 special status plant species have been documented within a 9-quad search of the study area (Appendix B). Based on the presence of vegetation communities described above and soils at the site as well as historic site disturbance, the study area has the potential to support no special status plant species. Other special status plant species documented within the 9-quad search are unlikely or have no potential to occur in the study area for one or more of the following reasons:

- Hydrologic conditions (e.g., marsh habitat, seeps, riverine, pond habitat) necessary to support the special status plants do not exist on site.
- Edaphic (soil) conditions (e.g., rocky soils, sandy soils) necessary to support the special status plants do not exist on site.
- Topographic conditions (e.g., flats- plains or prairies) necessary to support the special status plants do not exist on site.
- Unique pH conditions (e.g., serpentine) necessary to support the special status plant species are not present on site.

3.3 Special Status Wildlife

In addition to wildlife listed as federal or state endangered and/or threatened, federal and state candidate species, CDFW Species of Special Concern, CDFW California Fully Protected species, USFWS Birds of Conservation Concern, and CDFW Special-status Invertebrates are all considered special-status species. Although these species generally have no special legal status, they are given special consideration under CEQA. The federal Bald and Golden Eagle Protection Act also provides broad protections to both eagle species that are roughly analogous to those of listed species. Bat species are also evaluated for conservation status by the Western Bat Working Group (WBWG), a non-governmental entity; bats named as a “High Priority” or “Medium Priority” species for conservation by the WBWG are typically considered special-status and considered under CEQA; bat roosts are protected under CDFW Fish and Game Code. In addition to regulations for special-status species, most native birds in the United States (including non-status species) are protected by the federal Migratory Bird Treaty Act of 1918 (MBTA) and the California Fish and Game Code (CFGC), i.e., sections 3503, 3503.5 and 3513. Under these laws, deliberately destroying active bird nests, eggs, and/or young is illegal.

Based on the databases given in Section 2.1, 51 special status wildlife species have been documented within a 9-quad search of the Project Study Area (Appendix B). Based on the presence of biological communities described above, the Project Study Area has the potential to support 2 of these special status wildlife species, neither of which are federal and/or state listed special status wildlife species (Table 2). A discussion of potential impacts or unlikelihood for impacts to occur is also provided in Section 4.1.

The remaining species found in the review of background literature were determined to be unlikely to occur due to absence of suitable habitat elements in and immediately adjacent to the Project Study Area. Habitat elements that were evaluated but found to be absent from the immediate area of the Project Study Area or surrounding habitats subject to potential indirect impacts include the following:

- Absence of suitable hydrologic conditions (e.g., riverine, wetland, adequate freshwater stream habitat, ponds, vernal pools, lake, salt or brackish waters) necessary to support the special status wildlife (e.g., longfin smelt, green sea turtle, steelhead, foothill yellow-legged frog, California giant salamander, California red-legged frog, red-bellied newt, bank swallow, California freshwater shrimp, tricolored blackbird); note the ephemeral nature of the on-site channel would not likely support any of the special status aquatic wildlife documented in the vicinity.
- Absence of associated vegetation communities (e.g., salt marsh habitat, old growth coniferous forests) necessary to support the special-status wildlife (e.g., salt marsh common yellowthroat, northern spotted owl).
- Absence of suitable habitat elements (e.g., cliffs, caves, mines etc.) for special status wildlife (e.g., Townsend's big-eared bat).
- Absence of basking habitat (e.g., for western pond turtle).
- No suitably sized burrows or evidence of potential dens are present on or immediately adjacent to the study area (e.g., burrowing owl, American badger).

Table 2. Special Status Wildlife with Potential to Occur in the Project Study Area

Scientific Name/ Common Name	Status[1]	Habitat	Potential for Occurrence
Birds			
Baeolophus inornatus Oak Titmouse	BCC	Occurs year-round in woodland and savannah habitats where oaks are present, as well as riparian areas. Nests in tree cavities.	**Moderate Potential.** Suitable nesting habitat and trees with appropriate tree cavities present on site. Limited suitable foraging habitat present.
Picoides nuttallii Nuttall's Woodpecker	BCC	Year-round resident in lowland woodlands throughout much of California west of the Sierra Nevada. Typical habitat is dominated by oaks; also occurs in riparian woodland. Nests in tree cavities.	**Moderate Potential.** Suitable nesting habitat and trees with appropriate tree cavities present on site. Limited suitable foraging habitat present.

[1] FE/SE – Federal/State Endangered; FT/ST – Federal/State Threatened
SCE/T – State Candidate Endangered/Threatened; CFP – California Fully Protected
SSC – Species of Special Concern; BCC – Bird of Conservation Concern
SSI – Special Status Invertebrate; WBWG – Western Bat Working Group – Medium or High Priority Species

4.0 POTENTIAL IMPACTS AND MITIGATION

The assessment of impacts under CEQA is based on the change caused by the Project relative to the existing conditions within the Project Study Area. In applying CEQA Appendix G, the terms "substantial" and "substantially" are used as the basis for significance determinations in many of the thresholds but are not defined qualitatively or quantitatively in CEQA or in technical literature. In some cases, the determination requires application of best professional judgment based on knowledge of site conditions as well as the ecology and physiology of biological resources present in a given area. The CEQA and State CEQA Guidelines defines "significant effect on the environment" as "a substantial adverse change in the physical conditions which exist in the area affected by the proposed project." Pursuant to Appendix G, Section IV of the State CEQA Guidelines, the proposed Project would have a significant impact on biological resources if it would:

A. Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service.

B. Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or US Fish and Wildlife Service.

C. Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means.

D. Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors or impede the use of native wildlife nursery sites.

E. Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan.

4.1 Potentially Significant Impacts

<u>Ephemeral Stream Channel - Potential CDFW and RWQCB Jurisdiction</u>

One potentially jurisdictional ephemeral stream is present within the Project Study Area. Construction of the crush pad and cave facility entrance will result in permanent filling of approximately 28 linear feet of the potentially jurisdictional ephemeral stream channel (84 square feet), plus 2 feet of temporary impact. A minimum 35-foot streamside setback from top of bank, or Ordinary High-Water Mark (OHWM), of the ephemeral stream is therefore prescribed in accordance with the February, 2020, Watershed and Tree Protection Ordinance that requires

the 35’ setback for all activities covered under the Project, including grading, tree removal, and tree planting.

Permit authorizations are likely required from CDFW and San Francisco RWQCB for proposed filling of the ephemeral stream channel for a culverted crossing. Compensatory mitigation for unavoidable impacts to the stream channel will be provided through creation and/or restoration of an equal amount of stream channel in combination with oak woodland reforestation efforts on site where feasible. Permits from CDFW and RWQCB will require development and implementation of plans and specifications for the compensatory mitigation project, and interim monitoring and maintenance, in order to compensate for unavoidable impacts to streams.

Subsequent to County use permit approval, the project shall obtain a Lake and Streambed Alteration Agreement (LSAA) from the CDFW and Waste Discharge Requirement (WDR) permit from San Francisco RWQCB for temporary and permanent impacts to the ephemeral stream. Potential impacts to water quality and wildlife would be avoided and minimized by adhering to the BMPs and permit conditions established by CDFW and San Francisco RWQCB. The unavoidable impacts to ephemeral stream would be considered less-than-significant with issuance of permits from CDFW and San Francisco RWQCB and successful completion of compensatory mitigation for aquatic resource alterations.

Oak Woodland

Select tree removals in oak woodlands will take place to construct the winery improvements, including cave entrances and driveway widening. Tree avoidance measures and BMPs will also be implemented during project construction to minimize tree disturbance and tree mortality. The Project’s tree removals are limited to the least amount necessary to accomplish the Project goals while avoiding mature trees.

Approximately 0.12 acre of the proposed primary cave entrance and secondary entrance will encroach into the Napa County 35’-wide streamside setback. Removal of any vegetation canopy within this setback must be mitigated in accordance with Napa County Code Sec. 18.108.020D. A total of 9 oak trees will be removed to construct the wine cave portals and covered crush pad, 5 of which are located within the 35-foot (Appendix A, Figure 2). Oak woodland mitigation will be provided to offset oak removals located in driveway widening and winery improvement areas, and to ensure that any loss of vegetation canopy coverage within the 35-foot streamside setback is replaced on site. Planting of oak woodland canopy or preservation of comparable vegetation canopy cover on an acreage basis will be provided on an acreage basis at a minimum 3:1 ratio as part of compensatory mitigation plans provided for unavoidable impacts to ephemeral stream. Canopy replacement will be provided with successful implementation of mitigation for oak woodland. The unavoidable impacts to oak woodland would be considered less-than-significant with successful oak woodland canopy replacement.

Special Status Plant Species

The Project Study Area and surrounding site are heavily disturbed and have been developed for many years. No special status plant species have the potential to occur within the Project Study

Area. Therefore, no impacts are anticipated to special status plant species and no mitigation for special status plant species is recommended at this time.

Special Status Wildlife Species

Two (2) special status wildlife species are likely to be present within the Project Study Area; oak titmouse (*Baeolophus inornatus*), and Nuttall's woodpecker (*Picoides nuttallii*). The forested area inside and adjacent to the project footprint also provide suitable nesting habitat for numerous songbird species protected under the MBTA.

Given the developed and disturbed nature of the site, including the forest, and extensive vineyards, impacts to foraging habitat are not significant as it is poor quality foraging and nesting. Furthermore, the project will not create any barrier to dispersing or significant impact to foraging to wildlife in the area. Based on the findings stated above, the proposed project will have a less than significant impact on biological resources, and will not result in any significant adverse impacts to any federally and/or state endangered, rare, or threatened plant and wildlife species or their habitat pursuant to Section 15065 under CEQA.

Migratory birds

The Project Study Area provides suitable nesting substrate (trees, shrubs, grasses) for may non-status migratory birds. Impacts to nesting birds resulting in nest abandonment or direct mortality to chicks or eggs is considered a significant impact under CEQA.

4.2 Recommended Avoidance and Minimization Measures

The following measures are recommended to be implemented in the event any of the impacts described in Section 4.1 cannot be completely avoided by project design and/or recommended work windows (e.g., vegetation removal between Sept. 1 and Feb. 1.).

BIO-1. Ephemeral Stream Channel

Unavoidable temporary and permanent impacts to ephemeral stream channel will result from the construction of the crush pad and wine cave facility entrance (cave portal). The ephemeral stream feature is likely to be considered a Waters of the State under the Porter-Cologne Water Quality Control Act and CDFG.

The following is recommended to ensure potentially significant impacts to ephemeral stream channel are avoided:

- Provide a notice of proposed discharges and stream alteration to CDFW and San Francisco RWQCB for the proposed crush pad and wine cave facility entrances (cave portals), including plans for providing compensatory mitigation for the unavoidable impacts through on-site creation and/or restoration of an equivalent area of stream channel. Potential impacts to water quality and wildlife would be avoided and minimized by

adhering to the BMPs and permit conditions established by CDFW and San Francisco RWQCB. The measure will reduce potential impacts to less than significant.

BIO-2. Oak Woodland Within 35-foot Streamside Setback

Unavoidable temporary and permanent impacts to oak woodland due to tree removals will result from the construction of the crush pad and wine cave facility entrances (cave portals) within the 35-foot streamside setback, and from driveway widening. Removal of any vegetation canopy within the 35-foot streamside setback shall be mitigated in accordance with Napa County Sec. 18.108.020D by permanent replacement or preservation of comparable vegetation canopy cover on an acreage basis at a minimum 3:1 ratio unless set forth below. In issuing any discretionary approval for activities or projects on privately owned parcels of land within the AW district that are greater than 1 acre, the County shall require replacement of lost oak trees or oak woodlands, or permanent preservation of comparable habitat, at a minimum 3:1 ratio. Compensatory mitigation for oak woodland impacts and vegetation removal within the 35-foot streamside setback will be combined where feasible, in order to comply with the County oak tree replacement and streamside setback requirements. The location for replacement or preservation may be prioritized as follows:

1. Replacement or preservation shall first be accomplished on-site on lands with slopes of thirty percent or less and outside of stream and wetland setbacks.
2. If sufficient vegetation canopy cover cannot be reasonably accomplished under 1. above of this section, on-site preservation or replacement may occur on slopes greater than thirty percent and up to fifty percent in areas that result in the highest biological and water quality protections.
3. Replacement of vegetation canopy cover may occur within stream setbacks at a minimum 2:1 preservation ratio where a restoration plan prepared by a qualified professional biologist has determined aquatic resource functions and values are protected to the maximum practicable extent.
4. Non-native species shall not be subject to the vegetation canopy cover replacement or preservation requirements under BIO-2.

BIO-3. Migratory birds

If vegetation removal cannot be completed during the non-nesting season window between September 1 and February 1, the following is recommended to ensure potentially significant impacts to nesting birds are avoided:

- Pre-construction nesting bird surveys should be performed within the study area and up to 200 feet of proposed activities.
- If nests are found, a no-disturbance buffer should be placed around the nest until young have fledged or the nest is determined to be no longer active by the biologist. The size of the buffer may be determined by the biologist based on species, ambient conditions, and proximity to project-related activities.

5.0 REFERENCES

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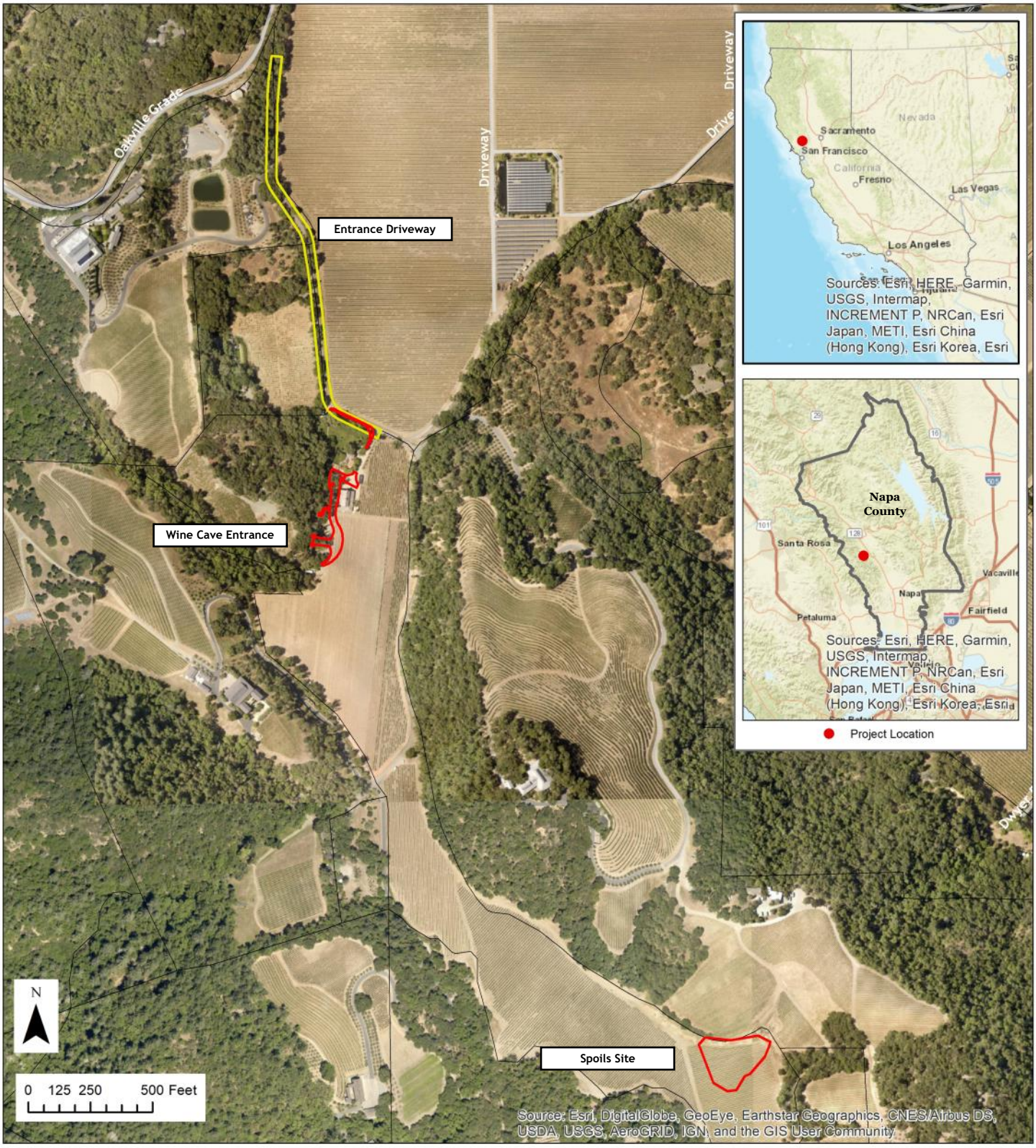
APPENDIX A

PROJECT FIGURES: PROJECT STUDY AREA AND SENSITIVE COMMUNITIES, CNDDB MAP RESULTS, CONCEPT RIPARIAN ENHANCEMENT PLAN

Figure 1: Location of Project Area
The Vineyard House Winery, Oakville, CA



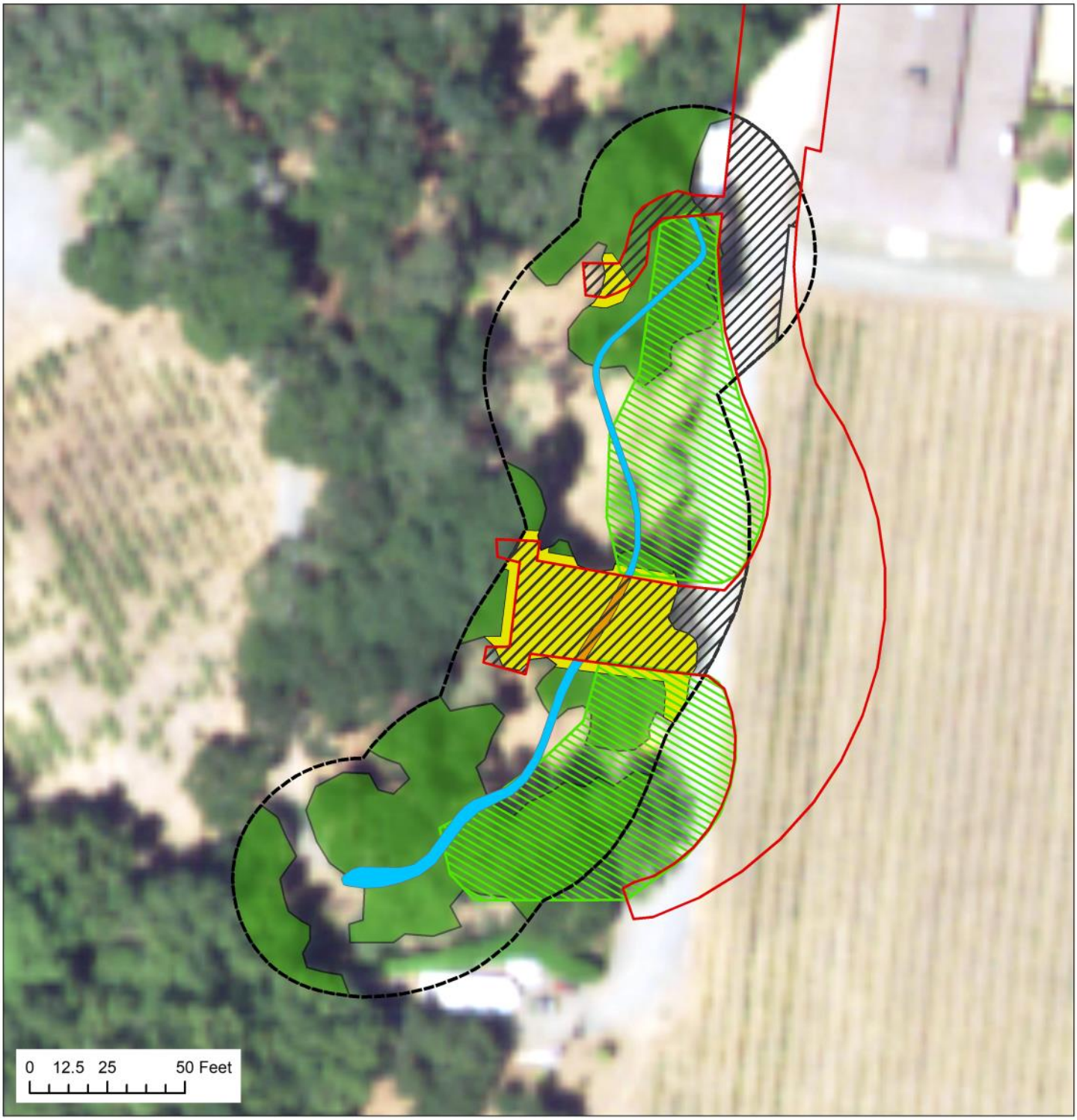
Project Study Area
Driveway Roadside Improvements Area (within the 40'-R/W)
Parcel Boundaries
Roads & Streets

Date: 11-18-2021
Data: Sol Ecology Inc., Napa Co., USGS

Base: ESRI
GIS: AG2115

SOL ECOLOGY
solecology.com

Figure 2: Sensitive Communities & Impacts Analysis
The Vineyard House Winery, Oakville, CA

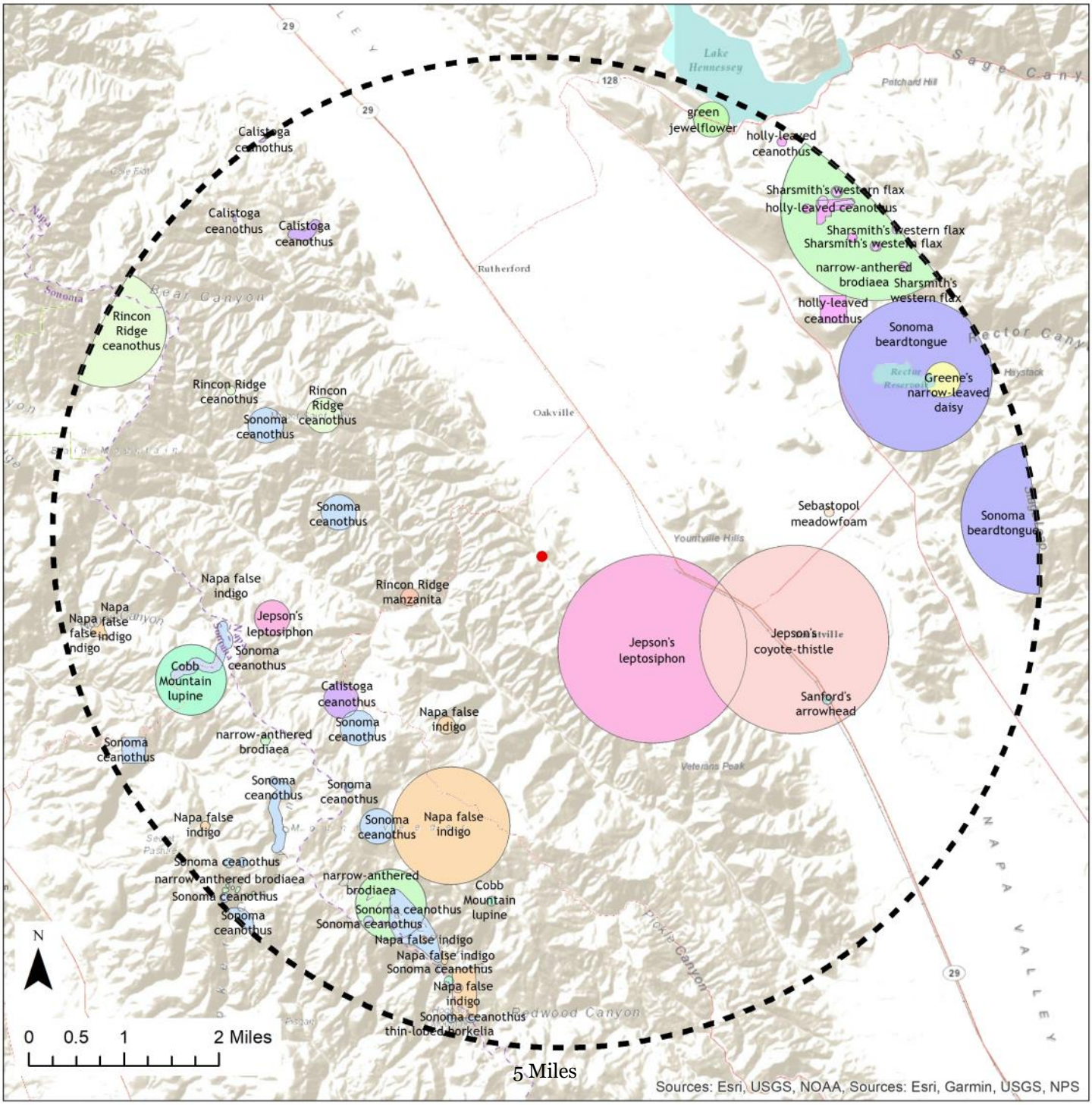


Date: 6-8-2021
Data: Sol Ecology Inc., Napa Co., USGS

Base: NAIP 2020
GIS: AG2115

SOL ECOLOGY
solecology.com

Figure 3: Special Status Plant Species within 5 Miles of the Project Site
The Vineyard House Winery, Oakville, CA

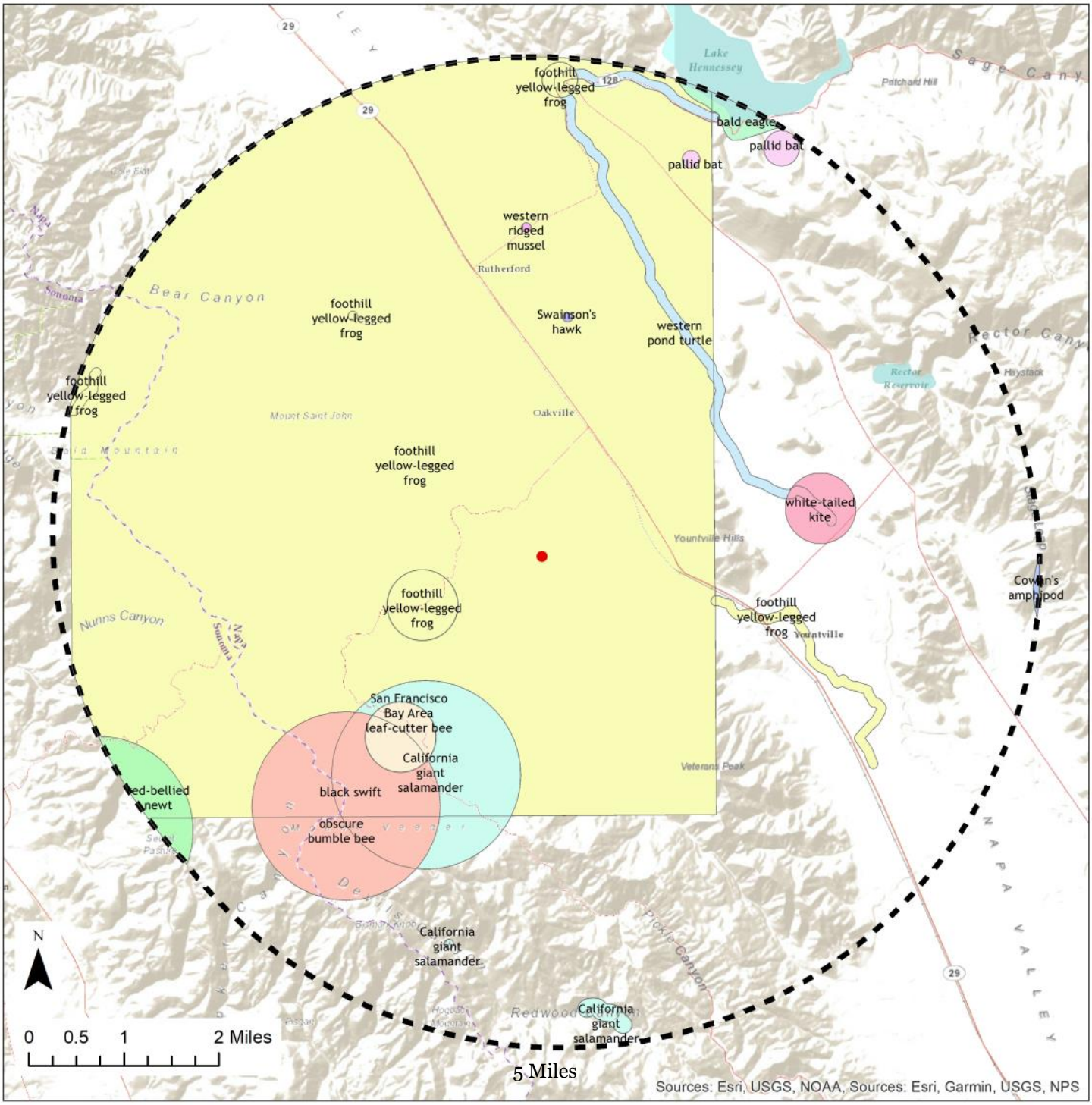


Project Location
5-Mile Buffer
Calistoga ceanothus (4)
Clara Hunt's milk-vetch (1)
Cobb Mountain lupine (3)
Greene's narrow-leaved daisy (1)
Jepson's coyote-thistle (1)
Jepson's leptosiphon (2)
Napa false indigo (6)
Rincon Ridge ceanothus (3)
Rincon Ridge manzanita (1)
Sanford's arrowhead (1)
Sebastopol meadowfoam (1)
Sharsmith's western flax (2)
Sonoma beardtongue (2)
Sonoma ceanothus (11)
green jewelflower (1)
holly-leaved ceanothus (4)
narrow-anthered brodiaea (4)
thin-lobed horkelia (1)

Date: 6-8-2021
Data: Sol Ecology Inc., Napa Co., CDFW
Base: ESRI
GIS: AG2115

SOL ECOLOGY
solecology.com

Figure 4: Special Status Animal Species within 5 Miles of the Project Site
The Vineyard House Winery, Oakville, CA



Project Location
5-Mile Buffer
California giant salamander (3)
Cowan's amphipod (1)
San Francisco Bay Area leaf-cutter bee (1)
Swainson's hawk (1)
bald eagle (1)
black swift (1)
foothill yellow-legged frog (6)
obscure bumble bee (1)
pallid bat (2)
red-bellied newt (1)
western pond turtle (1)
western ridged mussel (1)
white-tailed kite (1)

Date: 6-8-2021
Data: Sol Ecology Inc., Napa Co., CDFW
Base: ESRI
GIS: AG2115

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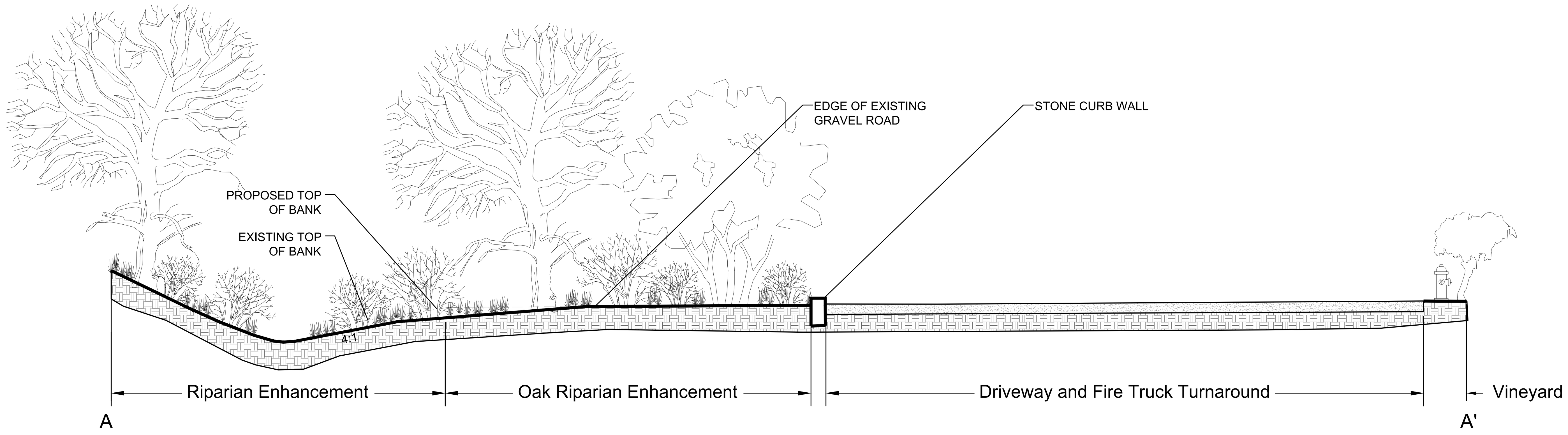
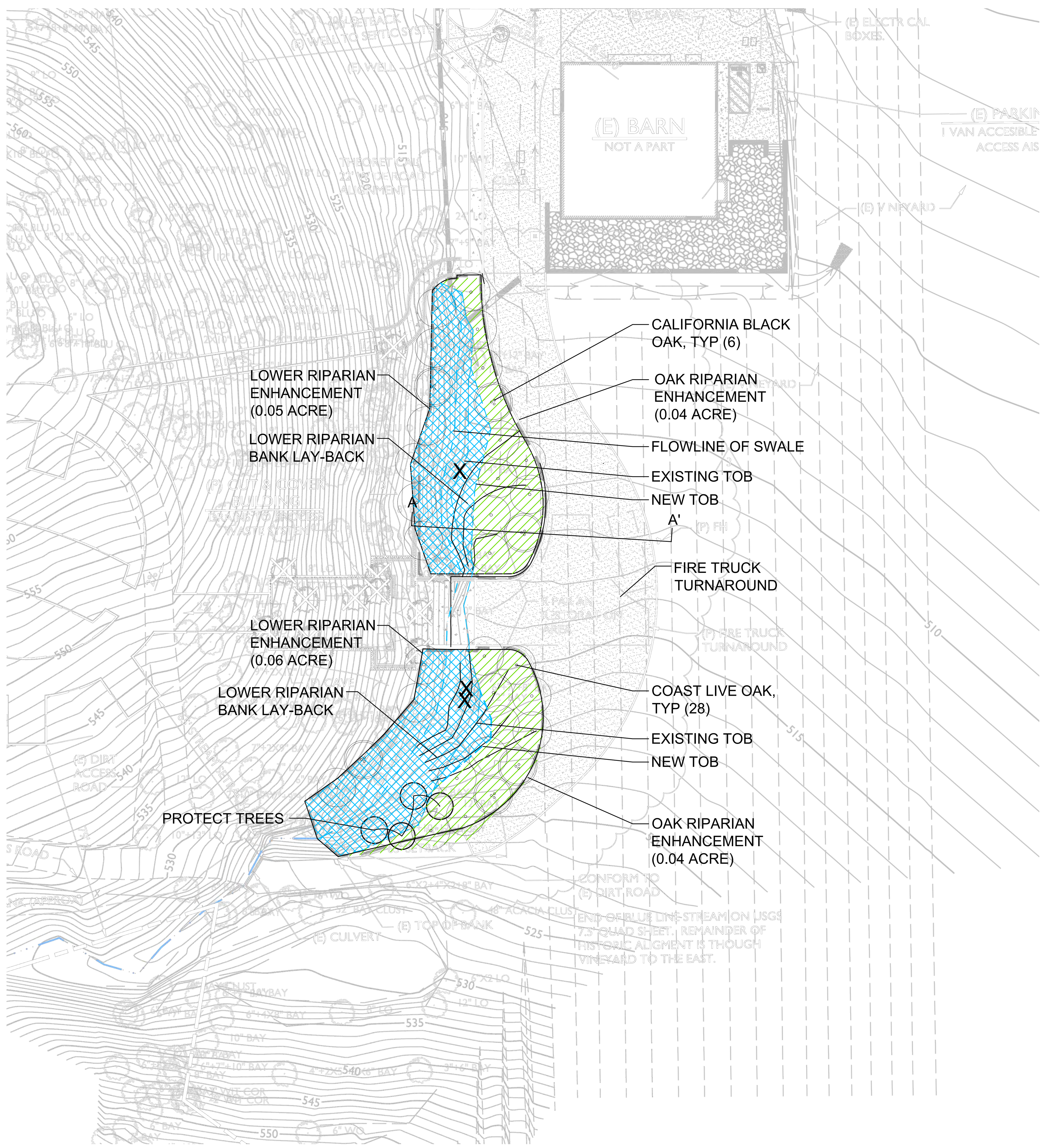
solecology.com



2 RIPARIAN ENHANCEMENT SECTION
SCALE: 1" = 6'



1 RIPARIAN ENHANCEMENT CONCEPT PLAN
SCALE: 1" = 40'

RIPARIAN ENHANCEMENT AND OAK RIPARIAN ENHANCEMENT CONCEPTUAL PLAN:

SUMMARY: Conduct riparian enhancement activities to replace lost floodplain and riparian habitat functioning associated with the proposed stream crossing for a new cave entrance and crush pad. Enhancement activities are located both upstream and downstream of the proposed cave entrance and crush pad, and would produce approximately 0.19 acres of mitigation as riparian enhancement.

PROPOSED WORK: Riparian enhancement activities include laying back the right bank of the stream using a 4:1 slope to create a wider stream channel and adjacent areas for oak riparian woodland and forest plantings. All non-native plantings in the footprint of the proposed enhancement activities would be removed and replaced with new native riparian trees, shrubs and herbaceous plants in the understory. Plantings would be located along both stream banks. Typical tree plantings include California bay, big-leaf maple, and coast live oak; shrubs include madrone in drier settings on the left bank, hillside gooseberry, snowberry, and California rose; and herbaceous plants include rigid hedge nettle and bracken fern. Irrigation of the planted areas would be required, in addition to monitoring and maintenance of the enhancement areas for a period of 5 years to ensure the mitigation is successful and satisfy regulatory agency permit requirements.

RIPARIAN ENHANCEMENT PLANTING (0.11 ACRE)

BOTANICAL NAME	COMMON NAME	SIZE	OC SPACING (FT)
QUERCUS AGRIFOLIA	COAST LIVE OAK	15 GAL	15
QUERCUS KELLOGGII	CALIFORNIA BLACK OAK	15 GAL	15
BACHARIS PILULARIS	COYOTE BRUSH	1 GAL	8
BROMUS CARINATUS	CALIFORNIA BROME	SEED	N/A
CAREX SENTA	ROUGH SEDGE	PLUG	2
ELYMUS GLAUCUS	BLUE WILD RYE	SEED	N/A
EPILOBIUM BRACHYCARPUM	WILLOWHERB	SEED	N/A
FESTUCA MICROSTACHYS	SMALL FESCUE	SEED	N/A
LUPINUS BICOLOR	MINIATURE LUPINE	SEED	N/A
ROSA CALIFORNICA	CALIFORNIA ROSE	1 GAL	5
SYMPHORICARPOS ALBUS VAR. LAEVIGA	SNOWBERRY	1 GAL	3
SCROPHULARIA CALIFORNICA	CALIFORNIA FIGWORT	SEED	N/A
TRIFOLIUM CILIOLATUM	TREE CLOVER	SEED	N/A

OAK RIPARIAN ENHANCEMENT PLANTING (0.08 ACRE)

BOTANICAL NAME	COMMON NAME	SIZE	OC SPACING (FT)
QUERCUS AGRIFOLIA	COAST LIVE OAK	15 GAL	15
QUERCUS KELLOGGII	CALIFORNIA BLACK OAK	15 GAL	15
BACHARIS PILULARIS	COYOTE BRUSH	1 GAL	8
BROMUS CARINATUS	CALIFORNIA BROME	SEED	N/A
CLARKIA AMOENA	MOUNTAIN GARLAND CLARK	SEED	N/A
CLARKIA BOTTAE	FARWELL TO SPRING CLARKI/	SEED	N/A
CLAYTONIA PERFOLIATA	MINER'S LETTUCE	SEED	N/A
ELYMUS GLAUCUS	BLUE WILD RYE	SEED	N/A
FESTUCA MICROSTACHYS	SMALL FESCUE	SEED	N/A
LUPINUS BICOLOR	MINIATURE LUPINE	SEED	N/A
LONICERA HISPADULA	HAIRY HONEYSUCKLE	1 GAL	3
MARAH FABACEA	CALIFORNIA MAN-ROOT	4" POT	2
POLYSTICHUM MUNITUM	WESTERN SWORD FERN	1 GAL	4
RIBES CALIFORNICUM	HILLSIDE GOOSEBERRY	1 GAL	5
SALVIA SONOMENSIS	CREEPING SAGE	1 GAL	3
SISYRINCHIUM BELLUM	BLUE EYED GRASS	4" POT	2
TRIFOLIUM CILIOLATUM	TREE CLOVER	SEED	N/A

10/27/21 RESTORATION CONCEPT
ORIGINAL DRAWING SIZE: 24 X 36

MWS Consulting
LANDSCAPE ARCHITECTURE & GRANT WRITING

THE VINEYARD HOUSE WINERY
RIPARIAN ENHANCEMENT CONCEPT PLAN
NAPA, CALIFORNIA

RIPARIAN ENHANCEMENT CONCEPT

Sheet
L1 OF 1

APPENDIX B

CNDDB, CNPS, AND IPAC SUMMARY TABLES

CNPS California Native Plant Society

*The database used to provide updates to the Online Inventory is under construction. View updates and changes made since May 2019 here.

Plant List

88 matches found. *Click on scientific name for details*

Search Criteria

Found in Quads 3812255, 3812254, 3812253, 3812245, 3812244, 3812243, 3812235 3812234 and 3812233;

Modify Search Criteria | Export to Excel | Modify Columns | Modify Sort | Display Photos

Scientific Name	Common Name	Family	Lifeform	Blooming Period	CA Rare Plant Rank	State Rank	Global Rank
Allium peninsulare var. franciscanum	Franciscan onion	Alliaceae	perennial bulbiferous herb	(Apr)May-Jun	1B.2	S2	G5T2
Alopecurus aequalis var. sonomensis	Sonoma alopecurus	Poaceae	perennial herb	May-Jul	1B.1	S1	G5T1
Amorpha californica var. napensis	Napa false indigo	Fabaceae	perennial deciduous shrub	Apr-Jul	1B.2	S2	G4T2
Amsinckia lunaris	bent-flowered fiddleneck	Boraginaceae	annual herb	Mar-Jun	1B.2	S3	G3
Antirrhinum virga	twig-like snapdragon	Plantaginaceae	perennial herb	Jun-Jul	4.3	S3?	G3?
Arctostaphylos bakeri ssp. bakeri	Baker's manzanita	Ericaceae	perennial evergreen shrub	Feb-Apr	1B.1	S1	G2T1
Arctostaphylos stanfordiana ssp. decumbens	Rincon Ridge manzanita	Ericaceae	perennial evergreen shrub	Feb-Apr(May)	1B.1	S1	G3T1
Astragalus breweri	Brewer's milk-vetch	Fabaceae	annual herb	Apr-Jun	4.2	S3	G3
Astragalus claranus	Clara Hunt's milk-vetch	Fabaceae	annual herb	Mar-May	1B.1	S1	G1
Astragalus clevelandii	Cleveland's milk-vetch	Fabaceae	perennial herb	Jun-Sep	4.3	S4	G4
Astragalus tener var. tener	alkali milk-vetch	Fabaceae	annual herb	Mar-Jun	1B.2	S1	G2T1
Balsamorhiza macrolepis	big-scale balsamroot	Asteraceae	perennial herb	Mar-Jun	1B.2	S2	G2
Blennosperma bakeri	Sonoma sunshine	Asteraceae	annual herb	Mar-May	1B.1	S1	G1
Brodiaea leptandra	narrow-anthered brodiaea	Themidaceae	perennial bulbiferous herb	May-Jul	1B.2	S3?	G3?
Calamagrostis ophitidis	serpentine reed grass	Poaceae	perennial herb	Apr-Jul	4.3	S3	G3
Calandrinia breweri	Brewer's calandrinia	Montiaceae	annual herb	(Jan)Mar-Jun	4.2	S4	G4
Calochortus uniflorus	pink star-tulip	Liliaceae	perennial bulbiferous	Apr-Jun	4.2	S4	G4

			herb				
Calycadenia micrantha	small-flowered calycadenia	Asteraceae	annual herb	Jun-Sep	1B.2	S2	G2
Calystegia collina ssp. oxyphylla	Mt. Saint Helena morning-glory	Convolvulaceae	perennial rhizomatous herb	Apr-Jun	4.2	S3	G4T3
Castilleja ambigua var. ambigua	johnny-nip	Orobanchaceae	annual herb (hemiparasitic)	Mar-Aug	4.2	S3S4	G4T4
Castilleja ambigua var. meadii	Mead's owl's-clover	Orobanchaceae	annual herb (hemiparasitic)	Apr-May	1B.1	S1	G4T1
Ceanothus confusus	Rincon Ridge ceanothus	Rhamnaceae	perennial evergreen shrub	Feb-Jun	1B.1	S1	G1
Ceanothus divergens	Calistoga ceanothus	Rhamnaceae	perennial evergreen shrub	Feb-Apr	1B.2	S2	G2
Ceanothus gloriosus var. exaltatus	glory brush	Rhamnaceae	perennial evergreen shrub	Mar-Jun(Aug)	4.3	S4	G4T4
Ceanothus purpureus	holly-leaved ceanothus	Rhamnaceae	perennial evergreen shrub	Feb-Jun	1B.2	S2	G2
Ceanothus sonomensis	Sonoma ceanothus	Rhamnaceae	perennial evergreen shrub	Feb-Apr	1B.2	S2	G2
Centromadia parryi ssp. parryi	pappose tarplant	Asteraceae	annual herb	May-Nov	1B.2	S2	G3T2
Chorizanthe valida	Sonoma spineflower	Polygonaceae	annual herb	Jun-Aug	1B.1	S1	G1
Clarkia breweri	Brewer's clarkia	Onagraceae	annual herb	Apr-Jun	4.2	S4	G4
Clarkia gracilis ssp. tracyi	Tracy's clarkia	Onagraceae	annual herb	Apr-Jul	4.2	S3	G5T3
Collomia diversifolia	serpentine collomia	Polemoniaceae	annual herb	May-Jun	4.3	S4	G4
Cordylanthus tenuis ssp. brunneus	serpentine bird's-beak	Orobanchaceae	annual herb (hemiparasitic)	Jul-Aug	4.3	S3	G4G5T3
Delphinium uliginosum	swamp larkspur	Ranunculaceae	perennial herb	May-Jun	4.2	S3	G3
Downingia pusilla	dwarf downingia	Campanulaceae	annual herb	Mar-May	2B.2	S2	GU
Erigeron biolettii	streamside daisy	Asteraceae	perennial herb	Jun-Oct	3	S3?	G3?
Erigeron greenei	Greene's narrow-leaved daisy	Asteraceae	perennial herb	May-Sep	1B.2	S3	G3
Eryngium constancei	Loch Lomond button-celery	Apiaceae	annual / perennial herb	Apr-Jun	1B.1	S1	G1
Eryngium jepsonii	Jepson's coyote thistle	Apiaceae	perennial herb	Apr-Aug	1B.2	S2?	G2?
Extriplex joaquinana	San Joaquin spearscale	Chenopodiaceae	annual herb	Apr-Oct	1B.2	S2	G2
Fritillaria liliacea	fragrant fritillary	Liliaceae	perennial bulbiferous herb	Feb-Apr	1B.2	S2	G2
Harmonia nutans	nodding harmonia	Asteraceae	annual herb	Mar-May	4.3	S3	G3
Hemizonia congesta ssp. congesta	congested-headed hayfield tarplant	Asteraceae	annual herb	Apr-Nov	1B.2	S2	G5T2
Hesperolinon bicarpellatum	two-carpellate western flax	Linaceae	annual herb	May-Jul	1B.2	S2	G2
Hesperolinon sharsmithiae	Sharsmith's western flax	Linaceae	annual herb	May-Jul	1B.2	S2	G2Q
Horkelia tenuiloba	thin-lobed horkelia	Rosaceae	perennial herb	May-Jul(Aug)	1B.2	S2	G2
Iris longipetala	coast iris	Iridaceae	perennial	Mar-May	4.2	S3	G3

			rhizomatous herb				
Juglans hindsii	Northern California black walnut	Juglandaceae	perennial deciduous tree	Apr-May	1B.1	S1	G1
Lasthenia burkei	Burke's goldfields	Asteraceae	annual herb	Apr-Jun	1B.1	S1	G1
Lasthenia conjugens	Contra Costa goldfields	Asteraceae	annual herb	Mar-Jun	1B.1	S1	G1
Lathyrus jepsonii var. jepsonii	Delta tule pea	Fabaceae	perennial herb	May-Jul(Aug-Sep)	1B.2	S2	G5T2
Layia septentrionalis	Colusa layia	Asteraceae	annual herb	Apr-May	1B.2	S2	G2
Legenere limosa	legenere	Campanulaceae	annual herb	Apr-Jun	1B.1	S2	G2
Leptosiphon acicularis	bristly leptosiphon	Polemoniaceae	annual herb	Apr-Jul	4.2	S4?	G4?
Leptosiphon jepsonii	Jepson's leptosiphon	Polemoniaceae	annual herb	Mar-May	1B.2	S2S3	G2G3
Leptosiphon latisectus	broad-lobed leptosiphon	Polemoniaceae	annual herb	Apr-Jun	4.3	S4	G4
Lessingia hololeuca	woolly-headed lessingia	Asteraceae	annual herb	Jun-Oct	3	S2S3	G3?
Lilaeopsis masonii	Mason's lilaeopsis	Apiaceae	perennial rhizomatous herb	Apr-Nov	1B.1	S2	G2
Lilium rubescens	redwood lily	Liliaceae	perennial bulbiferous herb	Apr-Aug(Sep)	4.2	S3	G3
Limnanthes vinculans	Sebastopol meadowfoam	Limnanthaceae	annual herb	Apr-May	1B.1	S1	G1
Lomatium repostum	Napa lomatium	Apiaceae	perennial herb	Mar-Jun	4.3	S3	G3
Lupinus sericatus	Cobb Mountain lupine	Fabaceae	perennial herb	Mar-Jun	1B.2	S2?	G2?
Micropus amphibolus	Mt. Diablo cottonweed	Asteraceae	annual herb	Mar-May	3.2	S3S4	G3G4
Monardella viridis	green monardella	Lamiaceae	perennial rhizomatous herb	Jun-Sep	4.3	S3	G3
Navarretia cotulifolia	cotula navarretia	Polemoniaceae	annual herb	May-Jun	4.2	S4	G4
Navarretia heterandra	Tehama navarretia	Polemoniaceae	annual herb	Apr-Jun	4.3	S4	G4
Navarretia leucocephala ssp. bakeri	Baker's navarretia	Polemoniaceae	annual herb	Apr-Jul	1B.1	S2	G4T2
Navarretia leucocephala ssp. pauciflora	few-flowered navarretia	Polemoniaceae	annual herb	May-Jun	1B.1	S1	G4T1
Navarretia leucocephala ssp. plieantha	many-flowered navarretia	Polemoniaceae	annual herb	May-Jun	1B.2	S1	G4T1
Navarretia rosulata	Marin County navarretia	Polemoniaceae	annual herb	May-Jul	1B.2	S2	G2
Penstemon newberryi var. sonomensis	Sonoma beardtongue	Plantaginaceae	perennial herb	Apr-Aug	1B.3	S2	G4T2
Plagiobothrys strictus	Calistoga popcornflower	Boraginaceae	annual herb	Mar-Jun	1B.1	S1	G1
Poa napensis	Napa blue grass	Poaceae	perennial herb	May-Aug	1B.1	S1	G1
Puccinellia simplex	California alkali grass	Poaceae	annual herb	Mar-May	1B.2	S2	G3
Ranunculus lobbii	Lobb's aquatic buttercup	Ranunculaceae	annual herb (aquatic)	Feb-May	4.2	S3	G4
Sagittaria sanfordii	Sanford's arrowhead	Alismataceae	perennial rhizomatous herb	May-Oct(Nov)	1B.2	S3	G3

			(emergent)				
Senecio clevelandii var. clevelandii	Cleveland's ragwort	Asteraceae	perennial herb	Jun-Jul	4.3	S3	G4?T3Q
Sidalcea hickmanii ssp. napensis	Napa checkerbloom	Malvaceae	perennial herb	Apr-Jun	1B.1	S1	G3T1
Sidalcea oregana ssp. hydrophila	marsh checkerbloom	Malvaceae	perennial herb	(Jun)Jul-Aug	1B.2	S2	G5T2
Sidalcea oregana ssp. valida	Kenwood Marsh checkerbloom	Malvaceae	perennial rhizomatous herb	Jun-Sep	1B.1	S1	G5T1
Spergularia macrotheca var. longistyla	long-styled sand-spurrey	Caryophyllaceae	perennial herb	Feb-May(Jun)	1B.2	S2	G5T2
Streptanthus hesperidis	green jewelflower	Brassicaceae	annual herb	May-Jul	1B.2	S2	G2
Symphyotrichum lentum	Suisun Marsh aster	Asteraceae	perennial rhizomatous herb	(Apr)May-Nov	1B.2	S2	G2
Toxicoscordion fontanum	marsh zigadenus	Melanthiaceae	perennial bulbiferous herb	Apr-Jul	4.2	S3	G3
Trichostema ruygtii	Napa bluecurls	Lamiaceae	annual herb	Jun-Oct	1B.2	S1S2	G1G2
Trifolium amoenum	two-fork clover	Fabaceae	annual herb	Apr-Jun	1B.1	S1	G1
Trifolium hydrophilum	saline clover	Fabaceae	annual herb	Apr-Jun	1B.2	S2	G2
Triteleia lugens	dark-mouthed triteleia	Themidaceae	perennial bulbiferous herb	Apr-Jun	4.3	S4?	G4?
Viburnum ellipticum	oval-leaved viburnum	Adoxaceae	perennial deciduous shrub	May-Jun	2B.3	S3?	G4G5

Suggested Citation

California Native Plant Society, Rare Plant Program. 2021. Inventory of Rare and Endangered Plants of California (online edition, v8-03 0.39). Website http://www.rareplants.cnps.org [accessed 15 March 2021].

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The Calflora Database
The California Lichen Society
California Natural Diversity Database
The Jepson Flora Project
The Consortium of California Herbaria
CalPhotos

Questions and Comments
rareplants@cnps.org

Summary Table Report

California Department of Fish and Wildlife

California Natural Diversity Database

Query Criteria: Quad IS (Rutherford (3812244) OR Calistoga (3812255) OR St. Helena (3812254) OR Chiles Valley (3812253) OR Kenwood (3812245) OR Yountville (3812243) OR Glen Ellen (3812235) OR Sonoma (3812234) OR Napa (3812233))
 AND Taxonomic Group IS (Dune OR Scrub OR Herbaceous OR Marsh OR Riparian OR Woodland OR Forest OR Alpine OR Inland Waters OR Marine OR Estuarine OR Riverine OR Palustrine OR Ferns OR Gymnosperms OR Monocots OR Dicots OR Lichens OR Bryophytes OR Fungi)

Name (Scientific/Common)	CNDDB Ranks	Listing Status (Fed/State)	Other Lists	Elev. Range (ft.)	Total EO's	Element Occ. Ranks						Population Status		Presence		
						A	B	C	D	X	U	Historic > 20 yr	Recent <= 20 yr	Extant	Poss. Extirp.	Extirp.
Allium peninsulare var. franciscanum Franciscan onion	G5T2 S2	None None	Rare Plant Rank - 1B.2	280 600	25 S:3	0	0	1	0	0	2	2	1	3	0	0
Alopecurus aequalis var. sonomensis Sonoma alopecurus	G5T1 S1	Endangered None	Rare Plant Rank - 1B.1 SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden	1,180 1,180	21 S:1	0	0	0	1	0	0	0	1	1	0	0
Amorpha californica var. napensis Napa false indigo	G4T2 S2	None None	Rare Plant Rank - 1B.2 SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden	330 2,100	76 S:32	5	6	6	2	0	13	12	20	32	0	0
Amsinckia lunaris bent-flowered fiddleneck	G3 S3	None None	Rare Plant Rank - 1B.2 BLM_S-Sensitive SB_UCBG-UC Botanical Garden at Berkeley SB_UCSC-UC Santa Cruz	195 195	93 S:1	0	0	0	0	0	1	0	1	1	0	0
Arctostaphylos stanfordiana ssp. decumbens Rincon Ridge manzanita	G3T1 S1	None None	Rare Plant Rank - 1B.1	300 900	12 S:3	0	1	1	0	0	1	1	2	3	0	0
Astragalus claranus Clara Hunt's milk-vetch	G1 S1	Endangered Threatened	Rare Plant Rank - 1B.1 SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden	320 500	6 S:4	0	2	2	0	0	0	0	4	4	0	0
Astragalus tener var. tener alkali milk-vetch	G2T1 S1	None None	Rare Plant Rank - 1B.2	15 15	65 S:1	0	0	0	0	1	0	1	0	0	0	1

Summary Table Report

California Department of Fish and Wildlife

California Natural Diversity Database

Name (Scientific/Common)	CNDDB Ranks	Listing Status (Fed/State)	Other Lists	Elev. Range (ft.)	Total EO's	Element Occ. Ranks						Population Status		Presence		
						A	B	C	D	X	U	Historic > 20 yr	Recent <= 20 yr	Extant	Poss. Extirp.	Extirp.
Balsamorhiza macrolepis big-scale balsamroot	G2 S2	None None	Rare Plant Rank - 1B.2 BLM_S-Sensitive USFS_S-Sensitive		51 S:1	0	0	0	0	0	1	1	0	1	0	0
Blennosperma bakeri Sonoma sunshine	G1 S1	Endangered Endangered	Rare Plant Rank - 1B.1 SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden	60 330	24 S:4	0	2	0	0	2	0	2	2	2	0	2
Brodiaea leptandra narrow-anthered brodiaea	G3? S3?	None None	Rare Plant Rank - 1B.2	400 1,932	39 S:23	1	7	0	0	1	14	8	15	22	1	0
Castilleja ambigua var. meadii Mead's owls-clover	G4T1 S1	None None	Rare Plant Rank - 1B.1	1,600 1,600	3 S:2	0	0	0	0	0	2	0	2	2	0	0
Ceanothus confusus Rincon Ridge ceanothus	G1 S1	None None	Rare Plant Rank - 1B.1 BLM_S-Sensitive SB_SBBG-Santa Barbara Botanic Garden	650 2,700	33 S:8	1	1	0	0	0	6	2	6	8	0	0
Ceanothus divergens Calistoga ceanothus	G2 S2	None None	Rare Plant Rank - 1B.2	320 1,900	26 S:20	2	4	1	2	0	11	9	11	20	0	0
Ceanothus purpureus holly-leaved ceanothus	G2 S2	None None	Rare Plant Rank - 1B.2 SB_SBBG-Santa Barbara Botanic Garden	475 2,350	43 S:16	0	5	1	0	1	9	9	7	15	1	0
Ceanothus sonomensis Sonoma ceanothus	G2 S2	None None	Rare Plant Rank - 1B.2 SB_SBBG-Santa Barbara Botanic Garden	475 2,600	30 S:28	3	1	0	1	0	23	21	7	28	0	0
Centromadia parryi ssp. parryi pappose tarplant	G3T2 S2	None None	Rare Plant Rank - 1B.2 BLM_S-Sensitive	350 390	39 S:2	0	1	0	0	0	1	1	1	2	0	0
Coastal and Valley Freshwater Marsh Coastal and Valley Freshwater Marsh	G3 S2.1	None None		400 400	60 S:1	0	0	1	0	0	0	1	0	1	0	0
Downingia pusilla dwarf downingia	GU S2	None None	Rare Plant Rank - 2B.2	10 1,600	132 S:6	1	0	0	1	1	3	3	3	5	0	1
Erigeron greenei Greene's narrow-leaved daisy	G3 S3	None None	Rare Plant Rank - 1B.2	300 1,200	20 S:7	0	1	0	0	0	6	6	1	7	0	0

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						A	B	C	D	X	U	Historic > 20 yr	Recent <= 20 yr	Extant	Poss. Extirp.	Extirp.
Eryngium constancei Loch Lomond button-celery	G1 S1	Endangered Endangered	Rare Plant Rank - 1B.1 SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden	2,060 2,060	4 S:1	0	1	0	0	0	0	1	0	1	0	0
Eryngium jepsonii Jepson's coyote-thistle	G2 S2	None None	Rare Plant Rank - 1B.2	620 620	19 S:2	0	0	0	0	0	2	1	1	2	0	0
Extriplex joaquinana San Joaquin spearscale	G2 S2	None None	Rare Plant Rank - 1B.2 BLM_S-Sensitive SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden	5 5	127 S:1	0	0	1	0	0	0	1	0	1	0	0
Fritillaria liliacea fragrant fritillary	G2 S2	None None	Rare Plant Rank - 1B.2 SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden USFS_S-Sensitive		82 S:2	0	0	0	0	0	2	2	0	2	0	0
Hemizonia congesta ssp. congesta congested-headed hayfield tarplant	G5T2 S2	None None	Rare Plant Rank - 1B.2 SB_UCBG-UC Botanical Garden at Berkeley	1,705 1,705	52 S:3	0	0	0	0	0	3	2	1	3	0	0
Hesperolinon sharsmithiae Sharsmith's western flax	G2Q S2	None None	Rare Plant Rank - 1B.2 BLM_S-Sensitive SB_UCSC-UC Santa Cruz	800 2,200	32 S:14	0	4	3	0	0	7	8	6	14	0	0
Horkelia tenuiloba thin-lobed horkelia	G2 S2	None None	Rare Plant Rank - 1B.2 SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden	1,230 1,230	27 S:1	0	0	0	0	0	1	1	0	1	0	0
Lasthenia burkei Burke's goldfields	G1 S1	Endangered Endangered	Rare Plant Rank - 1B.1 SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden SB_UCBG-UC Botanical Garden at Berkeley		35 S:1	0	0	0	0	0	1	1	0	1	0	0
Lasthenia conjugens Contra Costa goldfields	G1 S1	Endangered None	Rare Plant Rank - 1B.1 SB_UCBG-UC Botanical Garden at Berkeley	60 230	36 S:2	0	0	0	0	2	0	2	0	0	1	1

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						A	B	C	D	X	U	Historic > 20 yr	Recent <= 20 yr	Extant	Poss. Extirp.	Extirp.
Lathyrus jepsonii var. jepsonii Delta tule pea	G5T2 S2	None None	Rare Plant Rank - 1B.2 SB_BerrySB-Berry Seed Bank SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden	5 5	133 S:2	0	0	0	1	1	0	0	2	1	1	0
Layia septentrionalis Colusa layia	G2 S2	None None	Rare Plant Rank - 1B.2 BLM_S-Sensitive SB_UCBG-UC Botanical Garden at Berkeley	480 1,400	69 S:6	0	1	0	0	0	5	3	3	6	0	0
Legenere limosa legenere	G2 S2	None None	Rare Plant Rank - 1B.1 BLM_S-Sensitive SB_UCBG-UC Botanical Garden at Berkeley	1,400 1,400	83 S:1	0	0	0	0	1	0	1	0	0	0	1
Leptosiphon jepsonii Jepson's leptosiphon	G2G3 S2S3	None None	Rare Plant Rank - 1B.2 SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden SB_USDA-US Dept of Agriculture	350 1,900	51 S:21	1	1	1	1	0	17	5	16	21	0	0
Lilaeopsis masonii Mason's lilaeopsis	G2 S2	None Rare	Rare Plant Rank - 1B.1	10 10	198 S:1	0	1	0	0	0	0	0	1	1	0	0
Limnanthes vinculans Sebastopol meadowfoam	G1 S1	Endangered Endangered	Rare Plant Rank - 1B.1 SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden SB_UCBG-UC Botanical Garden at Berkeley	90 320	45 S:2	0	1	0	0	0	1	1	1	2	0	0
Lupinus sericatus Cobb Mountain lupine	G2? S2?	None None	Rare Plant Rank - 1B.2 BLM_S-Sensitive SB_UCSC-UC Santa Cruz	400 2,400	46 S:14	0	0	4	1	0	9	13	1	14	0	0
Navarretia leucocephala ssp. bakeri Baker's navarretia	G4T2 S2	None None	Rare Plant Rank - 1B.1	300 1,320	64 S:6	1	1	0	0	2	2	5	1	4	1	1

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						A	B	C	D	X	U	Historic > 20 yr	Recent <= 20 yr	Extant	Poss. Extirp.	Extirp.
Navarretia leucocephala ssp. pauciflora few-flowered navarretia	G4T1 S1	Endangered Threatened	Rare Plant Rank - 1B.1 BLM_S-Sensitive SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden	1,600 1,600	10 S:1	0	1	0	0	0	0	0	1	1	0	0
Navarretia rosulata Marin County navarretia	G2 S2	None None	Rare Plant Rank - 1B.2 BLM_S-Sensitive	2,100 2,100	15 S:1	1	0	0	0	0	0	0	1	1	0	0
Northern Vernal Pool Northern Vernal Pool	G2 S2.1	None None		560 1,400	20 S:6	0	1	0	0	0	5	6	0	6	0	0
Penstemon newberryi var. sonomensis Sonoma beardtongue	G4T3 S3	None None	Rare Plant Rank - 1B.3 BLM_S-Sensitive	1,400 2,750	15 S:5	0	1	0	0	0	4	2	3	5	0	0
Plagiobothrys strictus Calistoga popcornflower	G1 S1	Endangered Threatened	Rare Plant Rank - 1B.1 SB_UCBG-UC Botanical Garden at Berkeley	300 400	3 S:3	0	2	0	0	0	1	1	2	3	0	0
Poa napensis Napa blue grass	G1 S1	Endangered Endangered	Rare Plant Rank - 1B.1 SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden	340 400	2 S:2	0	2	0	0	0	0	0	2	2	0	0
Puccinellia simplex California alkali grass	G3 S2	None None	Rare Plant Rank - 1B.2 BLM_S-Sensitive	400 400	80 S:1	0	0	0	0	0	1	1	0	1	0	0
Sagittaria sanfordii Sanford's arrowhead	G3 S3	None None	Rare Plant Rank - 1B.2 BLM_S-Sensitive	80 80	126 S:1	0	0	1	0	0	0	0	1	1	0	0
Sidalcea hickmanii ssp. napensis Napa checkerbloom	G3T1 S1	None None	Rare Plant Rank - 1B.1 SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden		2 S:1	0	0	0	0	0	1	1	0	1	0	0
Sidalcea oregana ssp. hydrophila marsh checkerbloom	G5T2 S2	None None	Rare Plant Rank - 1B.2	1,800 1,800	35 S:1	0	0	0	0	1	0	1	0	0	1	0

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						A	B	C	D	X	U	Historic > 20 yr	Recent <= 20 yr	Extant	Poss. Extirp.	Extirp.
Sidalcea oregana ssp. valida Kenwood Marsh checkerbloom	G5T1 S1	Endangered Endangered	Rare Plant Rank - 1B.1 SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden SB_UCBG-UC Botanical Garden at Berkeley	400 400	2 S:1	0	0	1	0	0	0	0	1	1	0	0
Spergularia macrotheca var. longistyla long-styled sand-spurrey	G5T2 S2	None None	Rare Plant Rank - 1B.2	350 400	22 S:2	0	0	0	0	0	2	1	1	2	0	0
Streptanthus hesperidis green jewelflower	G2G3 S2S3	None None	Rare Plant Rank - 1B.2 BLM_S-Sensitive	500 1,215	35 S:5	0	1	0	0	0	4	4	1	5	0	0
Symphyotrichum lentum Suisun Marsh aster	G2 S2	None None	Rare Plant Rank - 1B.2 SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden SB_USDA-US Dept of Agriculture	5 5	175 S:1	0	0	0	1	0	0	1	0	1	0	0
Trichostema ruygtii Napa bluecurls	G1G2 S1S2	None None	Rare Plant Rank - 1B.2 SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden	95 1,720	19 S:10	0	0	1	0	0	9	1	9	10	0	0
Trifolium amoenum two-fork clover	G1 S1	Endangered None	Rare Plant Rank - 1B.1 SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden SB_UCBG-UC Botanical Garden at Berkeley SB_USDA-US Dept of Agriculture	100 100	26 S:2	0	0	0	0	0	2	2	0	2	0	0
Trifolium hydrophilum saline clover	G2 S2	None None	Rare Plant Rank - 1B.2	10 400	56 S:3	0	1	0	0	1	1	2	1	2	0	1
Valley Needlegrass Grassland Valley Needlegrass Grassland	G3 S3.1	None None		1,200 1,200	45 S:1	0	0	0	0	0	1	1	0	1	0	0
Viburnum ellipticum oval-leaved viburnum	G4G5 S3?	None None	Rare Plant Rank - 2B.3		39 S:2	0	0	0	0	0	2	2	0	2	0	0

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Query Criteria: Quad IS (Rutherford (3812244) OR Calistoga (3812255) OR St. Helena (3812254) OR Chiles Valley (3812253) OR Kenwood (3812245) OR Yountville (3812243) OR Glen Ellen (3812235) OR Sonoma (3812234) OR Napa (3812233))
 AND Taxonomic Group IS (Fish OR Amphibians OR Reptiles OR Birds OR Mammals OR Mollusks OR Arachnids OR Crustaceans OR Insects)

Name (Scientific/Common)	CNDDB Ranks	Listing Status (Fed/State)	Other Lists	Elev. Range (ft.)	Total EO's	Element Occ. Ranks						Population Status		Presence		
						A	B	C	D	X	U	Historic > 20 yr	Recent <= 20 yr	Extant	Poss. Extirp.	Extirp.
Accipiter striatus sharp-shinned hawk	G5 S4	None None	CDFW_WL-Watch List IUCN_LC-Least Concern	900 900	22 S:1	1	0	0	0	0	0	1	0	1	0	0
Agelaius tricolor tricolored blackbird	G1G2 S1S2	None Threatened	BLM_S-Sensitive CDFW_SSC-Species of Special Concern IUCN_EN-Endangered NABCI_RWL-Red Watch List USFWS_BCC-Birds of Conservation Concern	566 566	955 S:1	0	0	0	0	0	1	1	0	1	0	0
Ambystoma californiense California tiger salamander	G2G3 S2S3	Threatened Threatened	CDFW_WL-Watch List IUCN_VU-Vulnerable		1336 S:1	0	0	0	0	1	0	1	0	0	1	0
Ammodramus savannarum grasshopper sparrow	G5 S3	None None	CDFW_SSC-Species of Special Concern IUCN_LC-Least Concern	2,150 2,150	27 S:1	1	0	0	0	0	0	0	1	1	0	0
Antrozous pallidus pallid bat	G4 S3	None None	BLM_S-Sensitive CDFW_SSC-Species of Special Concern IUCN_LC-Least Concern USFS_S-Sensitive WBWG_H-High Priority	15 1,760	420 S:23	2	3	1	1	4	12	17	6	19	1	3
Aquila chrysaetos golden eagle	G5 S3	None None	BLM_S-Sensitive CDF_S-Sensitive CDFW_FP-Fully Protected CDFW_WL-Watch List IUCN_LC-Least Concern USFWS_BCC-Birds of Conservation Concern	1,800 1,800	323 S:1	1	0	0	0	0	0	0	1	1	0	0

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						A	B	C	D	X	U	Historic > 20 yr	Recent <= 20 yr	Extant	Poss. Extirp.	Extirp.
Ardea alba great egret	G5 S4	None None	CDF_S-Sensitive IUCN_LC-Least Concern	350 350	43 S:1	0	0	1	0	0	0	0	1	1	0	0
Ardea herodias great blue heron	G5 S4	None None	CDF_S-Sensitive IUCN_LC-Least Concern	350 350	156 S:1	0	0	1	0	0	0	0	1	1	0	0
Athene cunicularia burrowing owl	G4 S3	None None	BLM_S-Sensitive CDFW_SSC-Species of Special Concern IUCN_LC-Least Concern USFWS_BCC-Birds of Conservation Concern	2,400 2,400	2011 S:1	0	0	0	0	0	1	0	1	1	0	0
Bombus caliginosus obscure bumble bee	G4? S1S2	None None	IUCN_VU-Vulnerable	600 2,500	181 S:5	0	0	0	0	0	5	5	0	5	0	0
Bombus crotchii Crotch bumble bee	G3G4 S1S2	None Candidate Endangered		300 300	437 S:1	0	0	0	0	0	1	1	0	1	0	0
Bombus occidentalis western bumble bee	G2G3 S1	None Candidate Endangered	USFS_S-Sensitive	25 750	306 S:5	0	0	0	0	0	5	5	0	5	0	0
Buteo regalis ferruginous hawk	G4 S3S4	None None	CDFW_WL-Watch List IUCN_LC-Least Concern USFWS_BCC-Birds of Conservation Concern	2,278 2,278	107 S:1	0	1	0	0	0	0	0	1	1	0	0
Buteo swainsoni Swainson's hawk	G5 S3	None Threatened	BLM_S-Sensitive IUCN_LC-Least Concern USFWS_BCC-Birds of Conservation Concern	82 140	2535 S:2	0	0	1	0	0	1	0	2	2	0	0
Caecidotea tomalensis Tomales isopod	G2 S2S3	None None		1,640 2,120	6 S:2	1	0	0	0	0	1	2	0	2	0	0
Calasellus californicus An isopod	G2 S2	None None		25 25	3 S:1	0	0	0	0	0	1	1	0	1	0	0

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Coccyzus americanus occidentalis western yellow-billed cuckoo	G5T2T3 S1	Threatened Endangered	BLM_S-Sensitive NABCI_RWL-Red Watch List USFS_S-Sensitive USFWS_BCC-Birds of Conservation Concern	600 600	165 S:1	0	0	0	0	0	1	1	0	1	0	0
Corynorhinus townsendii Townsend's big-eared bat	G4 S2	None None	BLM_S-Sensitive CDFW_SSC-Species of Special Concern IUCN_LC-Least Concern USFS_S-Sensitive WBWG_H-High Priority	295 1,600	635 S:7	0	1	0	0	0	6	7	0	7	0	0
Coturnicops noveboracensis yellow rail	G4 S1S2	None None	CDFW_SSC-Species of Special Concern IUCN_LC-Least Concern NABCI_RWL-Red Watch List USFS_S-Sensitive USFWS_BCC-Birds of Conservation Concern	60 60	45 S:1	0	0	0	0	0	1	1	0	1	0	0
Cypseloides niger black swift	G4 S2	None None	CDFW_SSC-Species of Special Concern IUCN_LC-Least Concern NABCI_YWL-Yellow Watch List USFWS_BCC-Birds of Conservation Concern	2,500 2,500	46 S:1	0	0	0	0	0	1	1	0	1	0	0
Dicamptodon ensatus California giant salamander	G3 S2S3	None None	CDFW_SSC-Species of Special Concern IUCN_NT-Near Threatened	350 2,185	234 S:15	4	3	0	0	0	8	5	10	15	0	0
Elanus leucurus white-tailed kite	G5 S3S4	None None	BLM_S-Sensitive CDFW_FP-Fully Protected IUCN_LC-Least Concern	10 2,160	180 S:5	3	1	0	0	1	0	2	3	4	1	0
Emys marmorata western pond turtle	G3G4 S3	None None	BLM_S-Sensitive CDFW_SSC-Species of Special Concern IUCN_VU-Vulnerable USFS_S-Sensitive	5 2,240	1398 S:20	4	5	5	0	0	6	7	13	20	0	0

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Eremophila alpestris actia California horned lark	G5T4Q S4	None None	CDFW_WL-Watch List IUCN_LC-Least Concern	2,275 2,275	94 S:1	1	0	0	0	0	0	0	1	1	0	0
Erethizon dorsatum North American porcupine	G5 S3	None None	IUCN_LC-Least Concern	277 277	523 S:1	0	0	0	0	0	1	0	1	1	0	0
Falco peregrinus anatum American peregrine falcon	G4T4 S3S4	Delisted Delisted	CDF_S-Sensitive CDFW_FP-Fully Protected USFWS_BCC-Birds of Conservation Concern	1,700 2,000	58 S:2	1	0	1	0	0	0	1	1	2	0	0
Geothlypis trichas sinuosa saltmarsh common yellowthroat	G5T3 S3	None None	CDFW_SSC-Species of Special Concern USFWS_BCC-Birds of Conservation Concern	7 12	112 S:2	0	0	0	0	0	2	2	0	2	0	0
Gonidea angulata western ridged mussel	G3 S1S2	None None		100 141	157 S:2	0	0	0	0	0	2	1	1	2	0	0
Haliaeetus leucocephalus bald eagle	G5 S3	Delisted Endangered	BLM_S-Sensitive CDF_S-Sensitive CDFW_FP-Fully Protected IUCN_LC-Least Concern USFS_S-Sensitive USFWS_BCC-Birds of Conservation Concern	315 315	329 S:1	1	0	0	0	0	0	1	0	1	0	0
Hydrochara rickseckeri Ricksecker's water scavenger beetle	G2? S2?	None None		1,500 1,500	13 S:1	0	0	0	0	0	1	1	0	1	0	0
Hydroporus leechi Leech's skyline diving beetle	G1? S1?	None None		1,180 1,180	13 S:1	0	0	0	0	0	1	1	0	1	0	0
Linderiella occidentalis California linderiella	G2G3 S2S3	None None	IUCN_NT-Near Threatened	1,693 1,693	508 S:1	0	0	0	0	0	1	1	0	1	0	0
Melospiza melodia samuelis San Pablo song sparrow	G5T2 S2	None None	CDFW_SSC-Species of Special Concern USFWS_BCC-Birds of Conservation Concern	10 10	41 S:1	0	0	0	0	0	1	1	0	1	0	0
Myotis evotis long-eared myotis	G5 S3	None None	BLM_S-Sensitive IUCN_LC-Least Concern WBWG_M-Medium Priority	840 840	139 S:1	0	0	0	0	0	1	0	1	1	0	0

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Myotis thysanodes fringed myotis	G4 S3	None None	BLM_S-Sensitive IUCN_LC-Least Concern USFS_S-Sensitive WBWG_H-High Priority	210 360	86 S:2	0	0	1	0	0	1	1	1	2	0	0
Myotis volans long-legged myotis	G4G5 S3	None None	IUCN_LC-Least Concern WBWG_H-High Priority	210 210	117 S:1	0	0	0	0	1	0	1	0	0	1	0
Myotis yumanensis Yuma myotis	G5 S4	None None	BLM_S-Sensitive IUCN_LC-Least Concern WBWG_LM-Low-Medium Priority	210 840	265 S:3	1	0	0	0	0	2	1	2	3	0	0
Nycticorax nycticorax black-crowned night heron	G5 S4	None None	IUCN_LC-Least Concern	157 157	37 S:1	0	0	0	0	0	1	0	1	1	0	0
Oncorhynchus mykiss irideus pop. 8 steelhead - central California coast DPS	G5T2T3Q S2S3	Threatened None	AFS_TH-Threatened	380 600	44 S:5	1	3	1	0	0	0	0	5	5	0	0
Pandion haliaetus osprey	G5 S4	None None	CDF_S-Sensitive CDFW_WL-Watch List IUCN_LC-Least Concern	544 662	504 S:2	1	0	0	0	0	1	0	2	2	0	0
Phalacrocorax auritus double-crested cormorant	G5 S4	None None	CDFW_WL-Watch List IUCN_LC-Least Concern	350 350	39 S:1	0	0	1	0	0	0	0	1	1	0	0
Progne subis purple martin	G5 S3	None None	CDFW_SSC-Species of Special Concern IUCN_LC-Least Concern	400 1,820	71 S:3	0	0	0	0	0	3	3	0	3	0	0
Rana boylii foothill yellow-legged frog	G3 S3	None Endangered	BLM_S-Sensitive CDFW_SSC-Species of Special Concern IUCN_NT-Near Threatened USFS_S-Sensitive	80 2,100	2468 S:32	9	9	1	0	2	11	12	20	30	1	1
Rana draytonii California red-legged frog	G2G3 S2S3	Threatened None	CDFW_SSC-Species of Special Concern IUCN_VU-Vulnerable	300 2,230	1643 S:15	2	5	5	0	2	1	2	13	13	1	1
Riparia riparia bank swallow	G5 S2	None Threatened	BLM_S-Sensitive IUCN_LC-Least Concern	25 25	298 S:1	0	0	0	0	0	1	1	0	1	0	0

Summary Table Report

California Department of Fish and Wildlife

California Natural Diversity Database

Name (Scientific/Common)	CNDDB Ranks	Listing Status (Fed/State)	Other Lists	Elev. Range (ft.)	Total EO's	Element Occ. Ranks						Population Status		Presence		
						A	B	C	D	X	U	Historic > 20 yr	Recent <= 20 yr	Extant	Poss. Extirp.	Extirp.
Spirinchus thaleichthys longfin smelt	G5 S1	Candidate Threatened		0 0	46 S:1	0	0	0	0	0	1	0	1	1	0	0
Stygobromus cowani Cowan's amphipod	G1 S1	None None		678 678	1 S:1	0	0	0	0	0	1	1	0	1	0	0
Syncaris pacifica California freshwater shrimp	G2 S2	Endangered Endangered	IUCN_EN-Endangered	100 358	20 S:7	3	3	1	0	0	0	2	5	7	0	0
Taricha rivularis red-bellied newt	G2 S2	None None	CDFW_SSC-Species of Special Concern IUCN_LC-Least Concern	800 1,000	136 S:3	0	0	0	0	0	3	3	0	3	0	0
Taxidea taxus American badger	G5 S3	None None	CDFW_SSC-Species of Special Concern IUCN_LC-Least Concern	20 2,200	594 S:3	1	0	0	0	0	2	2	1	3	0	0
Trachusa gummifera San Francisco Bay Area leaf-cutter bee	G1 S1	None None		1,614 1,614	3 S:1	0	1	0	0	0	0	1	0	1	0	0

IPaC **U.S. Fish & Wildlife Service**

IPaC resource list

This report is an automatically generated list of species and other resources such as critical habitat (collectively referred to as *trust resources*) under the U.S. Fish and Wildlife Service's (USFWS) jurisdiction that are known or expected to be on or near the project area referenced below. The list may also include trust resources that occur outside of the project area, but that could potentially be directly or indirectly affected by activities in the project area. However, determining the likelihood and extent of effects a project may have on trust resources typically requires gathering additional site-specific (e.g., vegetation/species surveys) and project-specific (e.g., magnitude and timing of proposed activities) information.

Below is a summary of the project information you provided and contact information for the USFWS office(s) with jurisdiction in the defined project area. Please read the introduction to each section that follows (Endangered Species, Migratory Birds, USFWS Facilities, and NWI Wetlands) for additional information applicable to the trust resources addressed in that section.

Location

Napa County, California

Local office

Sacramento Fish And Wildlife Office

(916) 414-6600
(916) 414-6713

Federal Building
2800 Cottage Way, Room W-2605
Sacramento, CA 95825-1846

Endangered species

This resource list is for informational purposes only and does not constitute an analysis of project level impacts.

The primary information used to generate this list is the known or expected range of each species. Additional areas of influence (AOI) for species are also considered. An AOI includes areas outside of the species range if the species could be indirectly affected by activities in that area (e.g., placing a dam upstream of a fish population even if that fish does not occur at the dam site, may indirectly impact the species by reducing or eliminating water flow downstream). Because species can move, and site conditions can change, the species on this list are not guaranteed to be found on or near the project area. To fully determine any potential effects to species, additional site-specific and project-specific information is often required.

Section 7 of the Endangered Species Act **requires** Federal agencies to "request of the Secretary information whether any species which is listed or proposed to be listed may be present in the area of such proposed action" for any project that is conducted, permitted, funded, or licensed by any Federal agency. A letter from the local office and a species list which fulfills this requirement can **only** be obtained by requesting an official species list from either the Regulatory Review section in IPaC (see directions below) or from the local field office directly.

For project evaluations that require USFWS concurrence/review, please return to the IPaC website and request an official species list by doing the following:

1. Draw the project location and click CONTINUE.
2. Click DEFINE PROJECT.
3. Log in (if directed to do so).
4. Provide a name and description for your project.
5. Click REQUEST SPECIES LIST.

Listed species[1] and their critical habitats are managed by the Ecological Services Program of the U.S. Fish and Wildlife Service (USFWS) and the fisheries division of the National Oceanic and Atmospheric Administration (NOAA Fisheries[2]).

Species and critical habitats under the sole responsibility of NOAA Fisheries are **not** shown on this list. Please contact NOAA Fisheries for species under their jurisdiction.

1. Species listed under the Endangered Species Act are threatened or endangered; IPaC also shows species that are candidates, or proposed, for listing. See the listing status page for more information. IPaC only shows species that are regulated by USFWS (see FAQ).
2. NOAA Fisheries, also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

The following species are potentially affected by activities in this location:

Birds

NAME	STATUS

Northern Spotted Owl Strix occidentalis caurina — Threatened
Wherever found
There is **final** critical habitat for this species. The location of the critical habitat is not available.
https://ecos.fws.gov/ecp/species/1123

Reptiles

NAME	STATUS
Green Sea Turtle Chelonia mydas	Threatened

No critical habitat has been designated for this species.
https://ecos.fws.gov/ecp/species/6199

Amphibians

NAME	STATUS
California Red-legged Frog Rana draytonii	Threatened

Wherever found
There is **final** critical habitat for this species. The location of the critical habitat is not available.
https://ecos.fws.gov/ecp/species/2891

Fishes

NAME	STATUS
Delta Smelt Hypomesus transpacificus	Threatened

Wherever found
There is **final** critical habitat for this species. The location of the critical habitat is not available.
https://ecos.fws.gov/ecp/species/321

Crustaceans

NAME	STATUS
California Freshwater Shrimp Syncaris pacifica	Endangered

Wherever found
No critical habitat has been designated for this species.
https://ecos.fws.gov/ecp/species/7903

Flowering Plants

NAME	STATUS
Clara Hunt's Milk-vetch Astragalus clarianus	Endangered

Wherever found
No critical habitat has been designated for this species.
https://ecos.fws.gov/ecp/species/3300

Critical habitats

Potential effects to critical habitat(s) in this location must be analyzed along with the endangered species themselves.

THERE ARE NO CRITICAL HABITATS AT THIS LOCATION.

Migratory birds

Certain birds are protected under the Migratory Bird Treaty Act[1] and the Bald and Golden Eagle Protection Act[2].

Any person or organization who plans or conducts activities that may result in impacts to migratory birds, eagles, and their habitats should follow appropriate regulations and consider implementing appropriate conservation measures, as described below.

1. The Migratory Birds Treaty Act of 1918.
2. The Bald and Golden Eagle Protection Act of 1940.

Additional information can be found using the following links:

- Birds of Conservation Concern http://www.fws.gov/birds/management/managed-species/birds-of-conservation-concern.php
- Measures for avoiding and minimizing impacts to birds http://www.fws.gov/birds/management/project-assessment-tools-and-guidance/conservation-measures.php
- Nationwide conservation measures for birds http://www.fws.gov/migratorybirds/pdf/management/nationwidestandardconservationmeasures.pdf

The birds listed below are birds of particular concern either because they occur on the USFWS Birds of Conservation Concern (BCC) list or warrant special attention in your project location. To learn more about the levels of concern for birds on your list and how this list is generated, see the FAQ below. This is not a list of every bird you may find in this location, nor a guarantee that every bird on this list will be found in your project area. To see exact locations of where birders and the general public have sighted birds in and around your project area, visit the E-bird data mapping tool (Tip: enter your location, desired date range and a species on your list). For projects that occur off the Atlantic Coast, additional maps and models detailing the relative occurrence and abundance of bird species on your list are available. Links to additional information about Atlantic Coast birds, and other important information about your migratory bird list, including how to properly interpret and use your migratory bird report, can be found below.

For guidance on when to schedule activities or implement avoidance and minimization measures to reduce impacts to migratory birds on your list, click on the PROBABILITY OF PRESENCE SUMMARY at the top of your list to see when these birds are most likely to be present and breeding in your project area.

NAME

BREEDING SEASON (IF A BREEDING SEASON IS INDICATED FOR A BIRD ON YOUR LIST, THE BIRD MAY BREED IN YOUR PROJECT AREA SOMETIME WITHIN THE TIMEFRAME SPECIFIED, WHICH IS A VERY LIBERAL ESTIMATE OF THE DATES INSIDE WHICH THE BIRD BREEDS ACROSS ITS ENTIRE RANGE. "BREEDS ELSEWHERE" INDICATES THAT THE BIRD DOES NOT LIKELY BREED IN YOUR PROJECT AREA.)

Clark's Grebe Aechmophorus clarkii — Breeds Jan 1 to Dec 31
This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

Common Yellowthroat Geothlypis trichas sinuosa — Breeds May 20 to Jul 31
This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA
https://ecos.fws.gov/ecp/species/2084

Golden Eagle Aquila chrysaetos — Breeds Jan 1 to Aug 31
This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.
https://ecos.fws.gov/ecp/species/1680

Lawrence's Goldfinch Carduelis lawrencei — Breeds Mar 20 to Sep 20
This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.
https://ecos.fws.gov/ecp/species/9464

Long-billed Curlew Numenius americanus — Breeds elsewhere
This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.
https://ecos.fws.gov/ecp/species/5511

Marbled Godwit Limosa fedoa — Breeds elsewhere
This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.
https://ecos.fws.gov/ecp/species/9481

Nuttall's Woodpecker Picoides nuttallii This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA https://ecos.fws.gov/ecp/species/9410	Breeds Apr 1 to Jul 20
Oak Titmouse Baeolophus inornatus This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9656	Breeds Mar 15 to Jul 15
Rufous Hummingbird selasphorus rufus This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/8002	Breeds elsewhere
Short-billed Dowitcher Limnodromus griseus This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9480	Breeds elsewhere
Song Sparrow Melospiza melodia This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA	Breeds Feb 20 to Sep 5
Spotted Towhee Pipilo maculatus clementae This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA https://ecos.fws.gov/ecp/species/4243	Breeds Apr 15 to Jul 20
Willet Tringa semipalmata This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds elsewhere
Wrentit Chamaea fasciata This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds Mar 15 to Aug 10

Probability of Presence Summary

The graphs below provide our best understanding of when birds of concern are most likely to be present in your project area. This information can be used to tailor and schedule your project activities to avoid or minimize impacts to birds. Please make sure you read and understand the FAQ "Proper Interpretation and Use of Your Migratory Bird Report" before using or attempting to interpret this report.

Probability of Presence (■)

APPENDIX C

FIELD SURVEYOR QUALIFICATIONS

Biological Assessment

Dana Riggs, Principal Biologist for Sol Ecology received her Bachelor of Science degree in Earth Systems, Science and Policy at California State University of Monterey Bay in 2001. Prior to founding Sol Ecology, she was a principal biologist and head of the Wildlife and Fisheries Department at WRA, a mid-size environmental consulting firm in San Rafael, California. She has 20 years of experience directing a broad range of resource studies from planning level to post-construction including: biological habitat assessments and mapping, special status species surveys, corridor studies, site restoration and monitoring, federal and state regulatory permitting, local permitting, mitigation and restoration planning for aquatic species, and NEPA and CEQA documentation for a variety of public and private sector clients. Dana has extensive experience working with species including California red-legged frog and California tiger salamander and has been approved by USFWS and CDFW to monitor for these species on projects throughout the state.

Mark Kalnins, Senior Regulatory Specialist for Sol Ecology received a Bachelor of Science in Plant Biology from Ohio State University in 1997 and a Master of Science in Environmental Science from Christopher Newport University-Virginia in 2000. He has worked as a professional wetland delineator, biologist, and regulatory permitting specialist in public, private, and non-profit sectors for over 17 years. Mark specializes in wetland delineation, assessments, and permitting, compensatory mitigation planning and implementation, special status plant surveys, floristic inventories, and vegetation community mapping in the SF Bay Area and Northern California.

Elspeth Mathau, Biologist for Sol Ecology received a Bachelor of Science in Environmental Studies, Biology, and Psychology at the University of Toronto in 2016 and a Master of Science in Ethnobotany at the University of Kent in Canterbury UK with training at Kew Royal Botanical Gardens in 2018. She started working in the environmental science education field in 2009 and has experience with plant restoration projects and floristic inventories. Her master's research was on ecological change and climate adaptation in the Moroccan High Atlas Mountains with indigenous communities. She has also worked with sustainable agriculture and STEM education non-profits focused on equity and inclusion programs. Elspeth specializes in special status wildlife surveys.

APPENDIX D

OBSERVED SPECIES TABLE

SCIENTIFIC NAME	COMMON NAME
PLANTS	
Aesculus californica	California buckeye
Agapanthus sp.	blue lily
Arbutus menziesii	Pacific madrone
Avena fatua	wild oat
Bromus diandrus	ripgut grass
Bromus hordeaceus	soft chess
Calendula arvensis	field-marigold
Carex sp.	sedge
Cardamine californica	milk maids
Cardamine hirsuta	hairy bittercress
Carpobrotus chilensis	sea fig
Chlorogalum sp.	soap plant
Claytonia perfoliata	miner's lettuce
Cupressus sempervirens	Italian cypress
Epilobium sp.	willowherb
Erodium botrys	big heron bill
Eschscholzia californica	California poppy
Festuca myuros	rattail sixweeks grass
Galium aparine	goose grass
Geranium dissectum	cutleaf geranium
Geranium purpureum	crane's-bill
Hordeum murinum	wall barley
Lathyrus vestitus	Bolander's pea
Lupinus bicolor	miniature lupine
Lysimachia arvensis	scarlet pimpernel
Marah fabacea	California man-root
Medicago polymorpha	California burclover
Nemophila heterophylla	white nemophila
Plantago lanceolata	English plantain
Quercus agrifolia	coast live oak
Quercus kelloggii	California black oak
Ranunculus californicus	California buttercup
Raphanus sativus	radish
Rubus armeniacus	Himalayan blackberry
Sanicula crassicaulis	Pacific sanicle
Scrophularia californica	California figwort
Senecio vulgaris	common groundsel
Sisyrinchium bellum	western blue-eyed-grass
Sonchus asper	prickly sow thistle

Sonchus oleraceus	common sow thistle
Stachys sp.	hedge-nettle
Stellaria media	common chickweed
Toxicodendron diversilobum	western poison oak
Umbellularia californica	California bay
Vicia sativa	spring vetch
WILDLIFE	
Amphibians and Reptiles	
Sceloporus occidentalis	Western fence lizard
Birds	
Buteo lineatus	Red-shouldered Hawk
Cathartes aura	Turkey vulture
Invertebrates	
Apis mellifera	European honeybees

SITE PHOTOGRAPHS

Photo 1. Culvert at the north end of the ephemeral stream (stream terminus) on north end of the project footprint.

Photo 2. North facing view of the end of ephemeral stream channel and bordering gravel road and oak forest. Stream and riparian enhancement activities are proposed in this location, and include relocation of the driveway to the south.

Photo 3. Stream bank and oak woodland with planted ornamentals

Photo 4. Oak woodland near top of the hillside between vineyards and above the ephemeral stream.

Photo 5. Proposed spoils disposal area with existing vineyard and disturbed/developed area, uplands in the foreground.