



Amici Cellars
Special Status Habitat
and Species Analysis

Project
1128

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Prepared for:
Amici Cellars

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Amici Cellars

Special Status Habitat and Species Analysis

I. INTRODUCTION

A. Purpose

This report is intended to assess the environmental conditions at the Amici Cellars Winery Modernization and Modification project site to determine: (1) the presence or likelihood of occurrence of any special status plant or wildlife species that are listed by State, Federal or local governments; and (2) to identify appropriate mitigation measures for impacts to these resources.

For purposes of this analysis, the Amici Cellars Winery Modernization and Modification project site constitutes the “proposed project,” the proposed work area is the “project site” and the Amici Cellars property constitutes the “study area.”

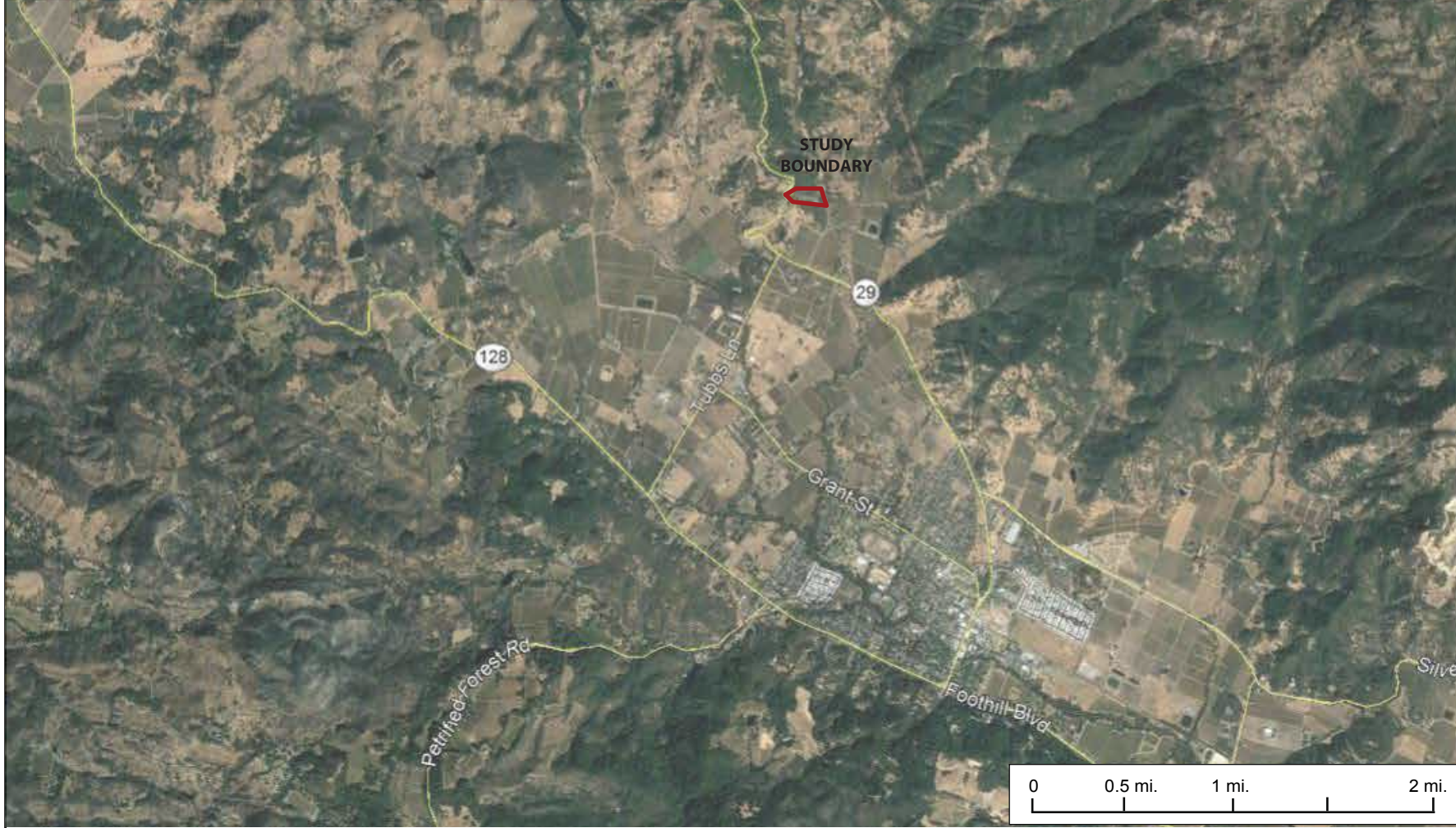
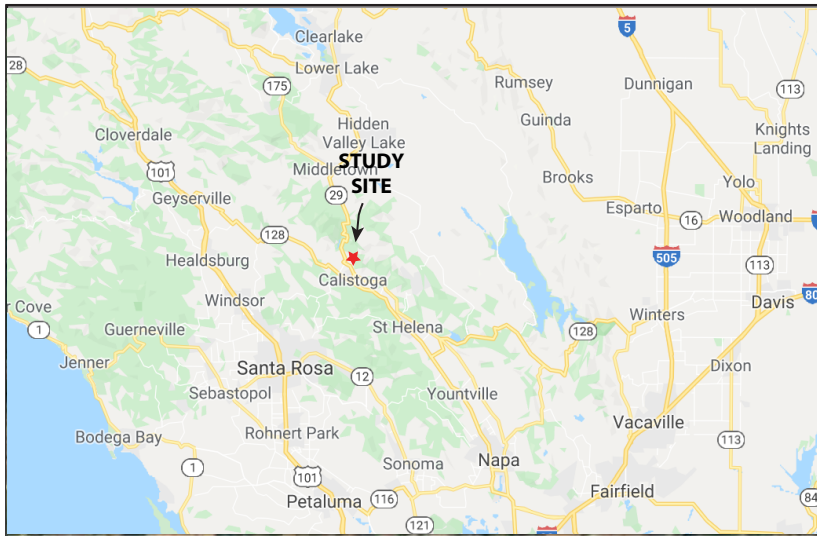
B. Methodology

Zentner Planning and Ecology conducted a site analyses and survey, which included reviewing the study area for special status species and habitats. The site survey occurred on July 16, 2020. The weather was clear and warm during the survey, which allowed for a thorough review of the site given its nature and condition.

In addition to this field work, the most recent versions of the California Department of Fish and Wildlife (CDFW) California Natural Diversity Database (CNDDDB), United States Fish and Wildlife Service (USFWS) special status species list, and the California Native Plant Society’s (CNPS) Online Inventory of Rare and Endangered Plants were reviewed. These resources were used during the preparation of this analysis to determine special-status plant and wildlife species potentially occurring in the project vicinity. The databases were searched for the study area and greater project area (*i.e.*, the surrounding 5-mile radius).

C. Project Location

The Amici Cellars property is located in northwestern Napa County (**Figure 1**) approximately 5 minutes or 2 miles away from downtown Calistoga. The property is accessed from Old



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Amici Cellars

Calistoga,
California

FIGURE 1 LOCATION MAP



BY: JPE

PROJECT: 1128

BASE MAP:
© 2018 GOOGLE MAPS

FILE: D:\Graphic Designer\My
Documents\PROJECTS\1100-1199\1128 Amici\
Adobe\Location.pdf

DATE: 08/05/2020 9:00AM

0 0.5 mi. 1 mi. 2 mi.

Lawley Toll Road via an existing driveway that crosses a parcel with a residence that is under common control as the Amici Cellars parcel. The property is situated within a curve of Highway 29, which runs along the south, west and northwest property line, on a ridge well-above the majority of the property.

The Amici Cellars property and study area are located in the Calistoga USGS 7.5-minute quadrangle, Township 7 north, Range 6 west. The site is located within the Upper Napa River Watershed



Photo 1: View looking east and down at the Amici Cellars winery. The winery building, parking area, and outdoor production area are shown in the photo. July 2020.

D. Project Description

The proposed Amici Cellars project is comprised of several project components which will modernize and modify the current winery operation. The project will expand the existing winery building from 2,558 square feet to 3,817 square feet, cover 790 square feet of existing outdoor production area, construct a 10,000 square foot cave, and complete improvements to the onsite agricultural pond and adjacent well's pump station. The project plans are included with this assessment as **Appendix A**.

The winery building expansion and outdoor production areas are located directly adjacent to, and surrounding, the existing winery building. As well, the proposed wine cave will be constructed with the entrances adjacent to the existing winery building. Soil excavated as part of the wine cave construction will be deposited on site in the deposit fields identified in the project plans (Appendix A).

Improvements at the onsite well and agricultural pond will include the installation of a pump house, fire pump and backup generator for fire management purposes.



Photo 2: View of the property's driveway. The winery is located upslope to the right, the agricultural pond is to the left of the photographer, and the driveway ahead connects to Old Lawley Toll Road. July 2020.

Finally, the project will expand wine production and make modest visitation, marketing, and operational changes associated with the property's Use Permit, though these proposed changes are not expected to result in impacts to the property's biological resources.

II. ENVIRONMENTAL SETTING

A. Site Description

The study area contains a private residence, a 2,558-square foot winery building, and a driveway. However, the majority of the property is undeveloped open space. The undeveloped open space is predominately oak woodland habitat, though the study area also contains a small agricultural pond, annual grassland, riparian habitat, and ornamental landscaped areas. The study area is moderately sloped with the lowest part of the site in the northeast where the property's driveway exits to Old Lawley Toll Road.



Photo 3: View of the agricultural pond. July 2020.

The majority of the study area has been disturbed or otherwise mowed and maintained for fire fuels reduction purposes. Though the property contains areas of relatively undisturbed land, these areas are mainly along the perimeter of the study area in areas that won't be impacted by the proposed project. The work associated with the wine cave construction and winery expansion will occur adjacent to the existing winery in areas that have already been modified and maintained as part of the current facilities construction and/or maintenance. Soil excavated as part of the wine cave expansion will be dispersed in the lower, northeastern part of the study area. Though work associated with the agricultural pond and well pump station will occur within the pond's 50-foot setback, the work area has already been heavily modified and disturbed, including the existing well.

A. Plant Communities

The study area is comprised of five plant communities: oak woodland, riparian/ephemeral drainage, agricultural pond, annual grassland, and landscaped ornamental. Each of these communities are discussed below and a full list of the plant species observed on site is provided in **Appendix B**.

The majority of the study area is comprised of oak woodland habitat. Though much of this area has previously been impacted, it contains a healthy canopy and a number of native woodland species. The canopy is comprised predominately of black oaks (*Quercus kelloggii*) and valley oaks (*Quercus lobata*) with occasional Douglas fir (*Pseudotsuga menziesii*), buckeye (*Aesculus californica*), and madrone (*Arbutus menziesii*). Common non-native annual grassland species such as wild oats (*Avena Fatua*), soft chess (*Bromus hordeaceus*), and Mediterranean brome (*Bromus madritensis*) are also present throughout the oak woodland habitat as are native species such as poison oak (*Toxicodendron diversilobum*), California fescue (*Festuca californica*), California grape (*Vitis californica*) and mule ears (*Wyethia glabra*).

The study area's ephemeral drainage contains similar species to the oak woodland habitat, though the species present in the drainage tend to be better adapted to wetter conditions with the inclusion of western brackenfern (*Pteridium aquilinum*) and denser stands of poison oak.

The agricultural pond contains a number of relatively common wetland species around its perimeter. These species include tall cyperus (*Cyperus eragristus*), cattail (*Typha sp*), spike rush (*Eleocharis macrostachya*), arroyo willow (*Salix lasiolepis*), and grey willow (*Salix exigua*).

Annual grassland habitat lies to the north of the agricultural pond. This area is dominated by common annual species such as Italian rye grass (*Festuca perennis*), wild oats, soft chess, and Mediterranean brome. The areas surrounding the residence and the winery building have been landscaped and contain common ornamental species.

Nomenclature used for plant names follows *The Jepson Manual*, Second Edition (Baldwin et. al. 2012) and changes made to this manual as published on the Jepson Interchange Project website (<http://ucjeps.berkeley.edu/interchange/index.html>). Nomenclature for wildlife follows the CDFW's *Complete list of Amphibian, Reptile, Bird, and Mammal Species in California* (2008) and any changes made to specie nomenclature as published in scientific journals since the publication of CDFW's list.



Photo 4: View looking downslope at the property's ephemeral drainage. July 2020.

B. Wildlife

A small number of wildlife species were observed on the study area. The observed wildlife included deer (*Odocoileus hemionus*) and western fence lizard (*Sceloporus occidenatlis*). A relatively small number of birds were observed as well, including: turkey vulture (*Cathartes aura*), black phoebe (*Sayornis nigricans*), California towhee (*Melospiza crissalis*), redtailed hawk (*Buteo jamaicensis*), American crow (*Corvus brachyrhynchos*), and woodpecker (*Melanerpes* sp.). Within the agricultural pond, a western pond turtle (*Emys marmorata*) was identified and a number of fish species including mosquito fish (*Gambusia affinis*), and smallmouth bass (*Micropterus dolomieu*) and/or largemouth bass (*Micropterus salmoides*).

The study area is comprised predominately of, or is adjacent to, moderately highly used areas including the winery and Highway 29. The proximity to these areas has likely limited the amount and diversity of wildlife within the study area to relatively common, suburban and rural wildlife species. Typical mammals likely include coyote (*Canis latrans*), raccoon (*Procyon lotor*), striped skunk (*Mephitis mephitis*), and lagomorphs (rabbits). Small mammals on the site likely include California vole (*Microtus californicus*) and deer mouse (*Peromyscus maniculatus*),

pocket gophers, and ground squirrels. These small mammals are also likely preyed upon by predators such as coyotes, California grey (*Urocyon cinereoargenteus californicus*) and red fox (*Vulpes vulpes*), and bobcat (*Lynx rufus*). As well, numerous predatory birds may forage at the property including red-tailed hawks (*Buteo jamaicensis*), red-shouldered hawks (*Buteo lineatus*), and American kestrels (*Falco sparverius*). The predatory birds that utilize the study area for foraging most likely nest in the surrounding area and the study area comprises only a small fraction of their foraging grounds and the project limits represent an even small fraction of their potential foraging grounds.

Other birds commonly found in these habitats include, mourning dove (*Zenaida macroura*), western meadowlark (*Sturnella neglecta*) and sparrows (*Spizella sp.*) and other common passerines. Common reptiles that are likely present include, southern alligator lizard (*Gerrhonotus multicarinatus*), gopher snake (*Pituophis melanoleucus*), and western rattle snake (*Crotalus viridis*).

III. SPECIAL-STATUS SPECIES AND HABITATS

A. Special-Status Species

1. Definitions

For the purposes of this assessment, “special-status” refers to those species that meet one or more of the following criteria: Plant and animal species listed by the USFWS or CDFW as Threatened or Endangered; species proposed for listing as Threatened or Endangered; or species that are candidates for listing as Threatened or Endangered. (Fish and Game Code §2050 et seq.; 14 CCR §670.1 et seq.) or the FESA (50 CFR 17.12 for plants; 50 CFR 17.11 for wildlife; various notices in the Federal Register [FR] for proposed species). For candidate species; FESA (50 CFR 17; FR Vol. 64, No. 205, pages 57533-57547, October 25, 1999); and under the CESA (California Fish and Game Code §2068).

Plant and animal species considered as “Endangered, Rare, or Threatened” are defined by Section 15380 of the CEQA Guidelines. Section 15380(b) states that a species of animal or plant is “Endangered” when its survival and reproduction in the wild are in immediate jeopardy from one or more causes, including loss of habitat, change in habitat, overexploitation, predation, competition, disease, or other factors. A species is “rare” when either “(A) although not presently threatened with extinction, the species is existing in such small numbers throughout all or a significant portion of its range that it may become Endangered if its environment worsens; or (B) the species is likely to become Endangered within the foreseeable future throughout all or a portion of its range and may be considered ‘Threatened’ as that term is used in the Federal Endangered Species Act” (ESA). Plants included on Ranks 1, 2, 3, or 4 of the California Native Plant Society (CNPS) or on lists maintained by local chapters of CNPS are also designated as special status species.

Animal species designated as “Fully Protected”, “Species of Special Concern,” or “Special Animals” by the CDFW have no legal status under the California Endangered Species Act (CESA), but CDFW recommends their protection as their populations are generally declining and they could be listed as Threatened or Endangered (under CESA) in the future or they are species considered by CDFW to be those of the “greatest conservation need” (CDFG 2009; Fish and Game Codes 3511, 4700, 5050, and 5515). “Special Animals” is a relatively recent and broad list developed by CDFW to encompass a number of other Federal, State, Local and Non-Governmental Organization (NGO) lists of special status species. It includes, for example, species listed by the US Bureau of Land Management (BLM), species listed by the Western Bat Working Group (WBWG) or the International Union for the Conservation of Nature (IUCN).

Birds designated by the USFWS as “Birds of Conservation Concern” also have no legal status under the ESA, but USFWS recommends their protection as their populations are generally declining, and they could be listed as Threatened or Endangered (under ESA) in the future. More information on special status species, including definitions and abbreviations, is provided in Appendix D.

The Migratory Bird Treaty Act (16 U.S.C. 703-711) makes it unlawful at any time, by any means, or in any manner to pursue, hunt, take, capture, kill, attempt to transport (import or export) any migratory bird including any part, nest, or egg of any such bird. Essentially, the law includes all species of birds, not just those typically considered migratory. Rock doves, also known as “pigeons” (*Columba livia*) and European starlings (*Sturnus vulgaris*) are the only birds that are exceptions to this law.

2. Special Status Species Potentially Occurring Within the Study Area

Figures 2 and 3 (Special Status Wildlife and Plant Species Occurrences) provide a graphical illustration of the known recorded special-status wildlife and plant species within five miles of the study area. According to CDFW’s California Natural Diversity Database (CNDDDB), a total of 16 special status wildlife species and 35 special status plant species are known to occur in the general region of the project, that is, within a 5-mile buffer surrounding the study area, these are shown on Figures 2 and 3. The CNDDDB species list is provided in **Appendix C** and the definitions for the special status species designations are provided in **Appendix D**.

a. Wildlife

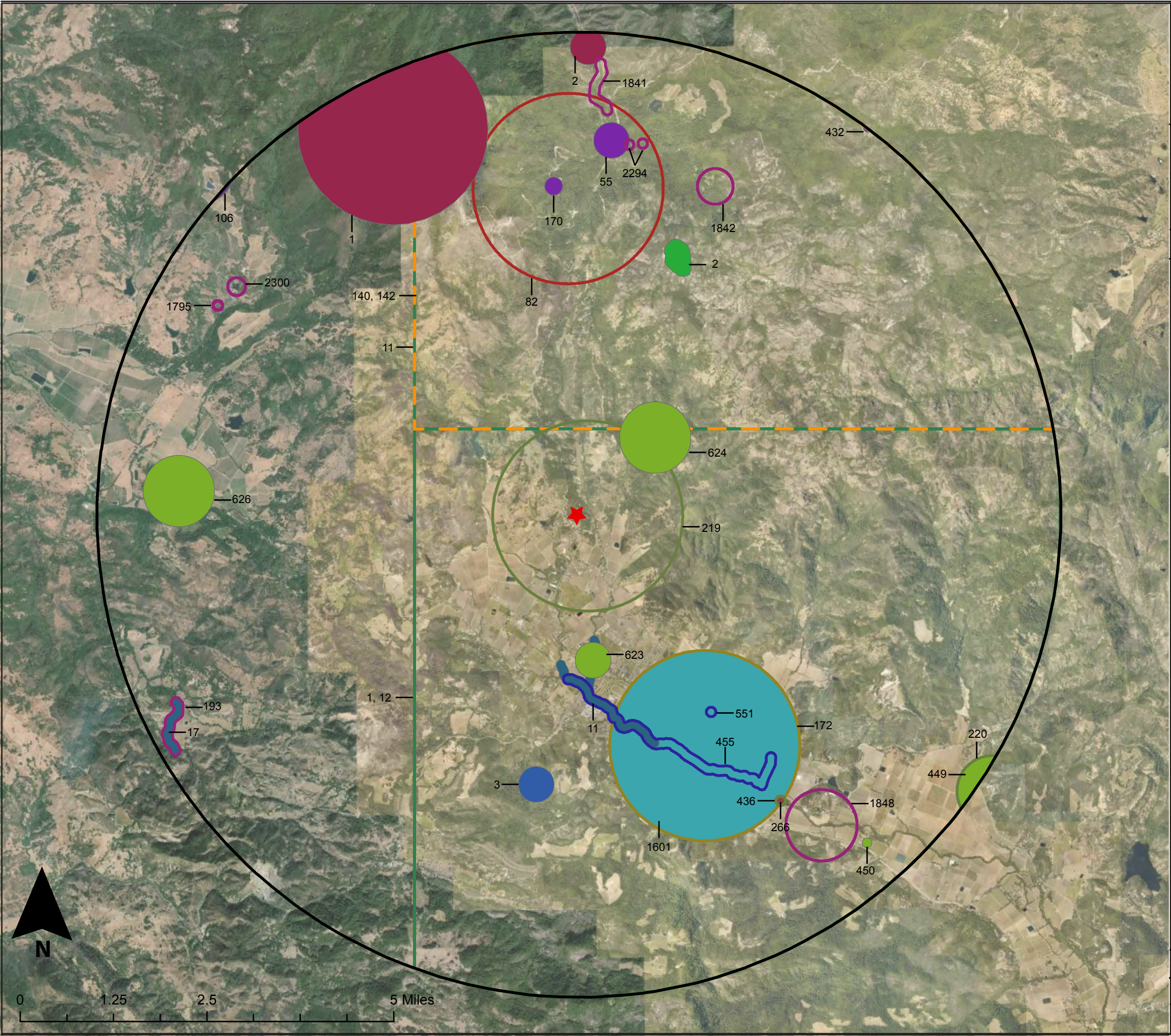
The majority of the 16 special status wildlife species that have recorded CNDDDB observations in the region around the study area are unlikely to occur on the property due to the absence of suitable habitat. **Table 1** provides the regulatory status, habitat requirements, and an evaluation of each of these species’ potential to occur in the study area. The species that have at least some potential to occur within the study area are discussed below. Of the species discussed below, only the western pond turtle (*emys marmorata*) has been observed in the study area.

The site also has a potential to support nesting raptor species or other nesting migratory birds. Nesting birds and raptors are protected under the CDFW Code and the Migratory Bird Treaty Act and are also discussed below.

Pallid bat (*Antrozous pallidus*) (USFS:S, DFW:SSC, IUCN:LC, BLM_S, WBWG_H)

The pallid bat is a large, long-eared vespertilionid bat. There are six subspecies of the pallid bat. Three are found in California, including *A. p. pacificus*, *A. p. pallidus*, and *A. p. minor*. This species is easily distinguished from other bat species with its large size, eyes, and ears, light tan coloration, pig-like snout, and distinctive skunk odor. Its color varies dependent on location, blond in desert locations and tan along the coast and farther north. Pallid bat scat commonly contains the remains of insects like scorpions, Jerusalem crickets, sphinx moths, and/or long-horned beetles.

In California, the species occurs throughout the state in a variety of habitats including low desert, oak woodland and coastal redwood forests, extending up to 3,000 m elevation in the Sierra Nevada. Of the three present subspecies, *A. p. pacificus*, the largest subspecies, occurs



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FIGURE 2
CNDDDB Special Status
Fauna Occurrences

LEGEND:

- | | |
|---|--|
| ★ Project Location | California freshwater shrimp, <i>Syncaris pacifica</i> , 11, 17 |
| ○ 5-Mile Buffer | red-bellied newt, <i>Taricha rivularis</i> , 106 |
| ■ sharp-shinned hawk, <i>Accipiter striatus</i> , 3 | serpentine cypress wood-boring beetle, <i>Trachykele hartmani</i> , 1, 2 |
| □ pallid bat, <i>Antrozous pallidus</i> , 219, 220, 266 | |
| □ obscure bumble bee, <i>Bombus caliginosus</i> , 82 | |
| □ western bumble bee, <i>Bombus occidentalis</i> , 172 | |
| ■ Townsend's big-eared bat, <i>Corynorhinus townsendii</i> , 449, 450, 623, 624, 626 | |
| ■ California giant salamander, <i>Dicamptodon ensatus</i> , 55, 170 | |
| □ western pond turtle, <i>Emys marmorata</i> , 455, 551 | |
| □ prairie falcon, <i>Falco mexicanus</i> , 140, 142 | |
| □ American peregrine falcon, <i>Falco peregrinus anatum</i> , 1, 11, 12 | |
| ■ Yuma myotis, <i>Myotis yumanensis</i> , 266 | |
| ■ purple martin, <i>Progne subis</i> , 2 | |
| □ foothill yellow-legged frog, <i>Rana boylei</i> , 193, 1795, 1842, 1848, 2294, 2300 | |
| ■ California red-legged frog, <i>Rana draytonii</i> , 1601 | |

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SOURCE: CNDDDB shapefiles July 2020, ERSI USGS National Map

Table 1
Special Status Animal Species

Scientific name	Common name	Status	Habitat	Potential habitat on-site	Range	Known range/ Critical habitat	Potential for occurrence on-site
MAMMALS							
<i>Antrozous pallidus</i>	pallid bat	BLM:S, CSC, IUCN:LC, USFS:S, WBWG:H, SA	Chaparral, Coastal scrub, Desert wash, Great Basin grassland, Great Basin scrub, Mojavean desert scrub, Riparian woodland, Sonoran desert scrub, Upper montane coniferous forest, Valley & foothill grassland	Yes	Permanent resident throughout California and western U.S. from Washington to Colorado to Mexico	Yes	Moderate: Potential roosting habitat present on site.
<i>Corynorhinus townsendii</i>	Townsend's big-eared bat	ST, CSC, SA	Broadleaved upland forest, Chaparral, Chenopod scrub, Great Basin grassland, Great Basin scrub, Joshua tree woodland, Lower montane coniferous forest, Meadow & seep, Mojavean desert scrub, Riparian forest, Riparian woodland, Sonoran desert scrub, Sonoran thorn woodland, Upper montane coniferous forest, Valley & foothill grassland	Yes	Permanent resident throughout California and western U.S. from British Columbia to Colorado to central Mexico	Yes	Moderate: Potential roosting habitat present on site.
<i>Myotis yummanensis</i>	Yuma myotis	BLM:S, IUCN:LC, WBWG:LM	Optimal habitats are open forests and woodlands with sources of water over which to feed. Distribution is closely tied to bodies of water. Maternity colonies in caves, mines, buildings, or crevices.	Yes	California, Oregon, Washinton, Arizona, New Mexico, Idaho, and portions of Nevada, Utah Montana Wyoming and Colorado and parts of Canada and Mexico.	Yes	Moderate: Potential roosting habitat present on site.
AMPHIBIANS							
Dicamptodon ensatus	California giant salamander	CDFW: SSC, IUCN:NT	Known from wet coastal forests near streams and seeps. Aquatic larvae found in cold, clear streams, occasionally in lakes and ponds. Adults known from wet forests under rocks and logs near streams and lakes.	None	Mendocino County south to Monterey County and east to Napa County	Yes	Unlikely: Only marginally suitable habitat present. Most recent local occurrence is from 1987.
Rana boylei	foothill yellow-legged frog	ST, BLM:S, CSC, IUCN:NT,USFS:S	Partially-shaded, shallow streams and riffles with a rocky substrate in a variety of habitats	None	Lower elevation streams draining the Pacific slope from west-central Oregon to northwestern Baja California.	Yes	Unlikely: No suitable habitat present.
Rana draytonii	California red-legged frog	FT, CSC, IUCN:VU, SA	Aquatic, Artificial flowing waters, Artificial standing waters, Freshwater marsh, Marsh & swamp, Riparian forest, Riparian scrub, Riparian woodland, Sacramento/San Joaquin flowing waters, Sacramento/San Joaquin standing waters, South coast flowing waters, South coast standing waters, Wetland	Yes	Mendocino County to Baja California, primarily west of the Cascade-Sierra crest.	Yes	Unlikely: Suitable habitat present though the presence of predators makes occurrence unlikely
Taricha rivularis	red-bellied newt	CDFW:SSC, IUCN:LC	Terrestrial habitats. Juveniles generally underground, adults active at surface in moist environments, will migrate over 1 KM to breed. Typically in in streams with moderate flow and clean, rocky substrate.	None	Coastal drainages from Humboldt County south to Sonoma County. Inland to Lake County, isolated populations of uncertain origin in Santa Clara County	Yes	Unlikely: No habitat and only one historic record in region.
REPTILES							
Emys marmorata	western pond turtle	BLM:S, CSC, IUCN:VU, USFS:S, SA	Aquatic, Artificial flowing waters, Klamath/North coast flowing waters, Klamath/North coast standing waters, Marsh & swamp, Sacramento/San Joaquin flowing waters, Sacramento/San Joaquin standing waters, South coast flowing waters, South coast standing waters, Wetland	Yes	Isolated populations exist in the western half of California from the Sierra Nevada foothills to the Pacific coast, throughout the length of the state.	Yes	Likely: Species observed on site within pond.
BIRDS							
Accipiter striatus	Sharp-shinned hawk	CDFW:WL, IUCN:LC	Preferes riparian areas, occurs in ponderosa pine, black oak, riparian deciduous, mixed conifer, and jeffrey pine habitats. Nests usually within 275 feet of water.	Yes	Widespread in North, Central, and South America.	Yes	Potential: Potentially suitable nesting habitat and suitable foraging habitat present.
<i>Falco mexicanus</i>	Prairie falcon	CDFW:WL, IUCN:LC, USFWS:BCC	Inhabts dry open terrain, either level or hilly. Breeding sites located on cliffs. Forages far afield, even to marshlands and ocean shores.	None	Throughout the western United States as well as parts of Mexico and Canada.	Yes	Unlikely: No suitable nesting habitat and only marginal foraging habitat present.
Falco peregrinus anatum	American peregrine falcon	CFP, SA	Near wetlands, lakes, rivers, or other waters; on cliffs, banks, dunes, mounds; also, human-made structures.	Marginal	Breeds along the Pacific coast from Alaska to Mexico and through California. Permanent resident in parts of California.	Yes	Unlikely: Marginal nesting and foraging habitat present.

Table 1
Special Status Animal Species

Scientific name	Common name	Status	Habitat	Potential habitat on-site	Range	Known range/ Critical habitat	Potential for occurrence on-site
<i>Progne subis</i>	Purple martin	CDFW: SSC, IUCN:LC	Inhabits woodlands, low elevation coniferous forest of Douglas-fir, Ponderosa pine, and Monterey pine. Nests in old woodpecker cavities mostly; also in human-made structures. Nests often in tall, isolated tree/snags.	Yes	Breeds in North America and winters in South America	Yes	Potential: Suitable habitat present, though species not observed during site survey.
INVERTEBRATES							
<i>Bombus caliginosus</i>	Obscur bumble bee	IUCN:VU	Food plant genera include baccharis, cirsium, lupinus, lotus, grindelia, and phacelia.	Marginal	Coastal areas from Santa Barbara County North to Washington State.	Yes	Unlikely: Only historic record in region. Site conditions only marginally suitable.
<i>Bombus occidentalis</i>	Western bumble bee	USFS:S, X:IM, SA	Once relatively widespread, but species has declined from central California to southern British Columbia	Marginal	Once realtively widespread, now in serious decline in central to southern California	Yes	Unlikely: Only historic record in region. Site conditions only marginally suitable.
Syncaris pacifica	California freshwater shrump	FE, SE, IUCN:EN	Shallow pools away from main streamflow. Winter, undercut banks with exposed roots. Summer leafy branches touching water.	None	Endemic to Marin, Napa, and Sonoma Counties. Found in low gradient streas where riparian cover is moderate to heavy	Yes	None: No habitat.
<i>Trachykele hartmani</i>	Serpentine cypress wood-boring beetle	-	Larvae develop in wood of sarget cypress (cupressus sargentii).	None	Only known from Lake, Napa and Sonoma Counties	Yes	None: No host plant on site.

along the coast and in the Coast Ranges west of the Central Valley. *A. p. minor*, the smallest subspecies, occurs in the Colorado River basin and adjacent mountain ranges. *A. p. pallidus* occurs throughout the rest of the state (including western San Diego County, the Central Valley, all of the Sierra Nevada and areas east of the crest, and, farther north, all areas east of the coast ranges) (Martin and Schmidly 1982).

The pallid bat is colonial with colonies forming in March to May and remaining until October (Barbour and Davis 1969). They are primarily a crevice roosting species and seek out rock crevices, old buildings, bridges, caves, mines and hollow trees (Barbour and Davis 1969). Breeding occurs in the spring and one to two young are born in the early summer. They remain dependent on their mothers for a minimum of 6 weeks.

There are three CNDDDB records within 5 miles of the study area. One of these records (occurrence #219) has been mapped with a broad range of uncertainty (4,299 meters) and includes the project site. This record was recorded in 1948 and describes a male and female specimen collected. The other two records are located southeast of the project site. One is approximately 4.75 miles away and describes a night roost under a bridge observed in 2017 and the other is just under 5 miles away and describes specimen collected in 1945 and 1955.

The study area contains numerous trees and structures that the pallid bat could utilize as roosting habitat. As well, the study area contains potential foraging habitat. Because the species is known from the area and the area contains potential roosting and foraging habitat, there is a possibility that the pallid bat could occur on the study area. Therefore, a pre-construction roosting bat survey should be completed and a two-step removal process, as described in the mitigation measures section, should be followed when removing trees. These measures will ensure the pallid bat is not negatively impacted by the proposed project.

Townsend's big-eared bat (*Corynorhinus townsendii townsendii*) (USFWS:SSC, USFS:S, DFW:SSC, IUCN:VU)

The Townsend's big-eared bat is one of five subspecies that occur across western North America, from British Columbia to the Mexican highlands, with isolated populations reaching east to the Ozarks and Appalachia. Two subspecies are found in the western United States including *C. t. townsendii* and *C. t. pallescens*. The species can be distinguished from other species in its genera by prominent, bilateral nose lumps and large, rabbit-like ears.

Townsend's big-eared bats take advantage of caves and cave-like roosting habitat, including abandoned mines, buildings, bridges, rock crevices, and hollow trees. The species is colonial with colony size ranging from a few individuals to several hundred. Males are typically solitary during mating season. Maternity colonies are formed between March and June with a single pup born between May and July. They forage in areas adjacent to wooded habitats and streams for primarily lepidopterans.

There are five CNDDDB records of the Townsend's big-eared bat within five miles of the study area. Four of these records are from collections in or prior to 1955, though one of the records was updated in 2012 with a recent guano sighting (occurrence #450). The closest of these records is approximately 1-mile northeast of the study area (occurrence #624). This record describes an observation from 1955 in a mine tunnel. The second nearest observation is just over 1-mile south of the study area (occurrence #623). This record describes a male and female captured in a small room in 1955. The most recent record is from 1995 (occurrence #626). This record is located approximately 4 miles west of the project site and describes one observed Townsend's big-eared bat observed in a frequently accessed barn. The other two records describe a collection in 1945 (occurrence #449) approximately 5 miles southeast of the study area and an observation in 1955 and fecal observation in 2012 approximately 4.5 miles southeast of the study area.

The study area contains a number of structures and trees that could provide roosting habitat for the Townsend's big-eared bat. As well, the study area contains potential foraging habitat for the species. Because the species is known to occur in the area and the study area contains potential roosting and foraging habitat, there is a possibility that the Townsend's big-eared bat could occur on the project site. Therefore, a pre-construction roosting bat survey should be completed and a two-step removal process, as described in the mitigation measures section, should be followed when removing trees. These measures will ensure that the Townsend's big-eared bat is not negatively impacted by the proposed project.

Yuma Myotis (*Myotis yumanensis*) (BLM:S, IUCN:LC, WBWG:LM)

Yuma Myotis bats are common and widespread in a variety of habitats throughout California. Their optimal habitat is open forests and woodlands with sources of water that they feed above. Yuma Myotis roosts in maternity colonies in mines, caves, buildings and crevices. They also roost in separate more open spaces like abandoned swallows nests or under bridges (Grenfell et. al. 1982). They may be found feeding and roosting with other bat species such as *Tadarida brasiliensis* and *Antrozous pallidus* (Grenfell et. al. 1982). Yuma Myotis has routine foraging sites for food and water, and they make short seasonal migrations to hibernation spots in the winter. Yuma Myotis mates in the fall and gives birth to a single pup in the summer (Dalquest 1947).

There is one CNDDDB record of Yuma myotis within 5 miles of the study area. This record (occurrence #266) is from 2017 and is located approximately 4.5 miles southeast of the project site. The record describes a night roost beneath a bridge over the Napa River riparian corridor.

The study area contains a number of structures and trees that could provide roosting habitat and open spaces that could provide foraging habitat for the Yuma myotis. As well, because the species is known to occur in the area and the study area contains potential roosting and foraging habitat, there is a possibility that the Yuma myotis could occur on the project site. Therefore, a pre-construction roosting bat survey should be completed and a two-step

removal process, as described in the mitigation measures section, should be followed when removing trees. These measures will ensure that the Yuma myotis and other bat species are not negatively impacted by the proposed project.

Foothill yellow-legged frog (*Rana boylei*) (USFS:S, BLM:S, DFW:SSC, IUCN:NT)

The foothill yellow-legged frog is a small species at 1.46 to 3.2 inches. They are gray, brownish, or olive, and tend to match the background of its habitat. It can be plain or mottled with dark spotting with no mask through the eyes, but a light-colored band across top of its head. The lower abdomen and rear legs are yellowish. Juveniles do not have the distinctive yellow coloring right away, but acquire it as they grow older.

The foothill yellow-legged frog occurs in the Coast Ranges from southern Oregon to the Transverse Mountains in Los Angeles County, east to the Sierras (Stebbins 2003). The species frequents shallow, slow, gravelly streams and rivers with sunny banks, in forests, chaparral and woodland habitats, from sea level to 6,700 ft. (2,040 m.) in elevation. It is rarely found far from permanent water and mostly active during daylight. They stay still along the river bottom along rock cover and litter, where they are camouflaged by their coloring. Mating and egg-laying occurs in water from mid-March until early June when streams have slowed from winter runoff. Clusters of eggs are attached to the downstream side of submerged rocks. Tadpoles transform in about 15 weeks, from July to September.

There are six CNDDDB records of the foothill yellow-legged frog within 5 miles of the project site. The closest CNDDDB record is approximately 4 miles north of the project site and describes a collection in 1951 from Van Ness Creek Drainage (occurrence #1842). The other records are located between 4 and five miles from the project site. These records describe foothill yellow-leg frog observations in Franz Creek (occurrence #193), an unnamed tributary to Kellogg Creek (occurrence # 1795), Saint Helena Creek (occurrence #1841), Van Ness Creek (occurrence # 2294), and a tributary to Kellogg Creek (occurrence #2300).

The study area's ephemeral drainage is the only potentially suitable habitat in the study area. However, this drainage is unable to support the foothill yellow-legged frog as it is ephemeral and only flows during rainfall or when the upstream agricultural pond is full. As well, the species is unlikely to pass through the study area in transit as the property is essentially cut off on one side by Highway 29 and the closest known occurrence of the species is approximately 4 miles away, which is a distance greater than the foothill yellow-legged frog is known to travel. For these reasons the species is unlikely to occur within the study area or be impacted by the proposed project.

California red-legged frog (CRLF) (*Rana aurora draytonii*) (USFWS:T, DFW:SSC, IUCN:VU)

The California Red-legged frog (CRLF) historically ranged from Redding and Marin County, south to northern Baja California (Jennings and Hayes 1994). Due to the loss and modification of habitat, predation by the non-native bullfrog, and impacted water quality, its range has been reduced to isolated drainages within coastal ranges and near-coastal foothills. The United States Fish and Wildlife Service (USFWS) notes that the CRLF once occupied 46 counties, but is now found in only 22 with the greatest concentrations in Monterey, San Luis Obispo and Santa Barbara Counties (USFWS 2002).

The CRLF is a relatively large, spade-shaped species at 1.7 to 5.1 inches in length. They vary in color, and may be brown, grey, olive, or reddish in color with black spots and irregular blotches. The lower abdomen and undersides of the legs are often, but not always, red. They have a dark mask above the upper jaw. The species is characterized by its prominent dorsolateral fold which extends on the body from eye to hip. The tadpoles are brown and marked with small, dark spots. The lower body is creamy white and also flecked with small spots.

From late-November to late-April, adult CRLF are typically found in or near breeding habitat, which consists of perennial or near-perennial, deep (greater than 2 foot) ponds, pools or similar habitats associated with dense riparian or marsh vegetation (Hayes and Jennings 1989, 1994, Jennings 1988). Breeding takes place in streams, deep pools, backwaters within streams and creeks, ponds, marshes, and stock ponds. CRLF can occur in ephemeral ponds or permanent streams and ponds; however, populations probably cannot persist in ephemeral streams (Jennings and Hayes 1985). Habitats with the highest densities of CRLF are deep-water ponds with dense stands of overhanging willows and a fringe of cattails (Jennings 1988; Rathbun et al. 1993).

During rainy nights during this time, however, they may also be found 200 to 300 feet away from the aquatic habitat (Zeiner et al 1988). From late-spring through fall, CRLF will stay near aquatic habitat, but during the end of this period they may move away from the breeding locale into nearby moist locations.

CRLF breeds during the winter and early spring, from as early as late November through April and May. Larvae (tadpoles) remain in breeding ponds until metamorphosis in the summer months. Mortality rates are high, with less than 1 percent of eggs laid reaching metamorphosis (Jennings et al. 1992). Males reach sexual maturity about 2 years after metamorphosis, while females require 3 years to attain sexual maturity (Jennings and Hayes 1985). Individuals of this species may live up to 10 years (Jennings et al. 1992). Young CRLF (eggs, larvae, and tadpoles) are found almost exclusively in ponds (such as stockponds) or slow-moving water in creeks, ditches, or similar habitat. Typically, these ponds or creeks are well-vegetated (Zeiner et al 1988) but habitat may also consist of well-grazed stockponds with little marsh vegetation (USFWS 2002). Young CRLF generally do not occur in aquatic habitats which also contain bullfrogs (Jennings and Hayes 1989).

Determining the location of CRLF habitat is complicated by CRLF movement away from relatively easily identified riparian and wetland habitats. Much of the movement ecology of CRLF is still poorly understood (Jennings and Hayes 1994), but they appear to move significant distances at two times during a year. First, adults move between winter oviposition sites and spring and summer foraging habitat (Jennings and Hayes 1989). Frogs observed in upland habitat at night during winter rains may represent such movement, but new aquatic habitat may also be found and colonized during such periods of reduced water stress. Movement into upland riparian habitat at such time may also protect frogs from catastrophic injury and transport by floodwaters (Jennings and Hayes 1994). Second, CRLF move into the shelter of riparian thickets during fall, when stream habitat is often much reduced (Rathbun et al. 1993). Such behavior appears to resemble estivation of amphibians like California tiger salamanders and spadefoots (Jameson 1981), however, the CRLF, especially the coastal populations, does not experience seasonal dormancy.

There is one CNDDDB record of a CRLF within 5 miles of the project site. This record (occurrence #1601) is located just under 2.5 miles southeast of the project site, though the record is mapped based on a described locality, not exact coordinates. The record, which is historic, describes an adult female collected sometime prior to September 1915 and the occurrence is presumed to be extirpated.

The pond on the project site provides potentially suitable habitat for the CRLF. However, the pond contains a number of species that would predate on the CRLF at all life stages including smallmouth and/or largemouth bass. The presence of these predatory species, as well as the mosquito fish, which also can prey on the larval stages of CRLF, make it unlikely that CRLF could breed and/or survive in the pond. The presence of these and the absence of any recent and non-extirpated observations of CRLF within 5 miles of the study area makes it very unlikely that the CRLF would occur within the study area. The species is, therefore, unlikely to occur on-site or be impacted by the proposed project.

Western Pond Turtle (*Emys marmorata*) (USFS:S, BLM:S, DFW:SSC, IUCN:VU)

The western pond turtle is a small to medium species growing from 3.5 to 8.5 inches in length. Hatchlings are 1 inch in shell length. They are dark brown, olive brown, or blackish in color with a low, unkeeled carapace. A pattern of darker lines or spots radiate from the centers of the scutes. The head and legs of the turtle are dark with creamy white or yellow speckling. Males have a light throat with no markings and a low domed carapace, while females have a throat with dark markings and a high-domed carapace.

Once inhabiting an extensive portion of the west, it is now listed as vulnerable due to a decline in its range. It is found along the west coast from the Coast Ranges to the central valley in California, north into Washington and British Columbia. Isolated populations may also occur

in Susanville, Ca, the Mojave Desert, and in Nevada in the Truckee, Carson, and East Walker Rivers. They have been found at elevations from sea level to over 5,900 ft.

The species is aquatic and is found in ponds, lakes, rivers, marshes, and irrigation ditches with abundant vegetation within woodlands, grasslands, or forests. They require logs, rocks, or exposed vegetation on which they bask in the sun. In summer droughts or during colder winter months, the turtles bury themselves in soft soil or hibernate in the muddy bottoms of pools. They may also move along creek channels until they find an isolated pool.

Mating occurs in April and May when the turtles reach 8 to 10 years in age. Eggs are laid between April and August along stream or pond margins.

During Zentner Planning and Ecology's review of the study area one western pond turtle was observed within the property's agricultural pond. This pond is, therefore, confirmed habitat for the species. There are two other CNDDDB records of the western pond turtle within 5 miles of the project site. Both of these records describe observations south of the study area; one in Napa Creek (occurrence #455) and the other in a series of ponds and unnamed tributaries (occurrence #551).

Though the western pond turtle was observed in the agricultural pond within the study area, there is no work proposed in the pond and very little work proposed in the area around the pond. The western pond turtle may periodically leave the pond for upland basking areas near the pond, however, the proposed work areas adjacent to the pond are the least likely areas to be utilized by the western pond turtle due to vegetation management activities, steeper slopes as compared to adjacent banks, and the proximity to the driveway and other higher use areas. It is therefore, unlikely that the western pond turtle will be impacted by the proposed project. However, wildlife exclusion fencing should be used in work areas adjacent to the pond, as described in the mitigation measures section below, to ensure that the species is not impacted by the proposed project.

Sharp-shinned hawk (*Accipiter striatus*) (CDFW:WL)

The sharp-shinned hawk is the smallest bird in the accipiter family. They are about the size of a pigeon with an average body length of 28 centimeters and an average wingspan of 58 centimeters. In shape and coloring they are very similar to Cooper's hawk; with a dark blackish crown, a blue-gray back and a tail crossed by dark stripes with a narrow white band at the tip.

Sharp-shinned hawks range throughout North and South America from Alaska and Saskatchewan to southeastern Brazil and the northern Argentine Andes (NatureServe, 2015). They are permanent residents in the U.S. in the northeast, the Midwest, and mountainous areas of the west from Colorado to Washington and throughout the coastal ranges of northern California to the San Francisco Bay Estuary (Sibley, 2001). Sharp-shinned hawk's primary habitat is dense coniferous forests, but they commonly nest in mixed or open

deciduous woodlands where conifers are scarce (NatureServe, 2015). They nest on crotches or tree branches close to the trunk between 3 – 18 meters above the ground. Nesting pairs will often remain faithful to the same nesting area, but may build new nests each season or modify old bird or squirrel nest. Nesting period is typically from April to August. Clutch size is 4-5 chicks which are independent at about 7 weeks from hatching. Sharp-shin foraging habitat is essentially the same as its nesting habitat, and prey items are small birds, mammals, herptiles and insects.

There is one CNDDDB record of a sharp-shinned hawk within 5 miles of the project site. The record is located approximately 3.5 miles south of the study area and describes a nest observed with two adults and 3 juveniles in 1993. The nest is described as against the Trunk of a small Douglas-Fir tree near Fiege Reservoir.

The study area contains numerous pine, oak, and other trees that could support nesting sharp-shinned hawks. As well, the study area contains potentially suitable foraging habitat for the species. However, the species has not been observed on the property and only one has been recorded within 5 miles. Furthermore, the species was not observed during Zentner Planning and Ecology's recent site survey, nor were any nests of sufficient size seen. However, because the site does contain potentially suitable breeding and foraging habitat, a pre-construction nesting bird and raptor survey should be completed, as described in the mitigation measures section below, to ensure the species is not impacted by the project.

Purple martin (*Progne subis*); CDFW:SSC, IUCN:LC

The purple martin is a large, broad-chested swallow. They have stout, slightly hooked bills and short forked tails. Their wings are long and tapered and adults are between 7.5 and 7.9 inches in length with a wingspan between 15 and 16 inches. Adult male purple martins are an iridescent dark blue to purple with brown to black wings. Females and juveniles have similar coloration to males though they are generally duller with variable amounts of grey on the head and chest and a whitish lower belly.

The purple martin is an insectivore and forages over towns, cities, parks, open fields, dunes, stream, wet meadows, beaver ponds and other open areas. They are cavity nesters and generally nest in bird houses, dead trees, buildings, cliffs, and sometimes human structures such as street lights or dock pilings. The purple martin lays between 3 and 6 pure white eggs in a clutch. The incubation period is between 15 and 18 days, while the nestling period is between 27 and 36 days.

There is one CNDDDB record of the purple martin within 5 miles of the study area. This record is located approximately 3 miles north of the study area on the southeast boundary of Robert Louis Stevenson Memorial State Park. The record describes 8 nesting adults observed in 1988.

The study area contains numerous trees and several buildings that the purple martin could potentially nest in. As well, the pond and nearby grassland could be utilized by the species for

foraging. Though there is potentially suitable habitat for this species, it was not observed on site during the recent survey. As well, there is only one record of the species within 5 miles of the study area and this record is over 30 years old. It is therefore unlikely that the purple martin would occur on site or be impacted by the proposed project. However, to ensure the species is not impacted by the proposed project nesting bird survey should be completed prior to starting work.

Nesting raptors (various species)

Nesting raptors of various species are generally protected under the CDFW Code and the Migratory Bird Treaty Act (MBTA). The study area contains potential foraging and nesting habitat for raptor species. As well, the study area contains and is adjacent to a number of mature trees that could be utilized for nesting. Accordingly, a preconstruction survey should be completed to determine the presence/absence of nesting raptors on or in proximity to the project area, prior to the start of construction.

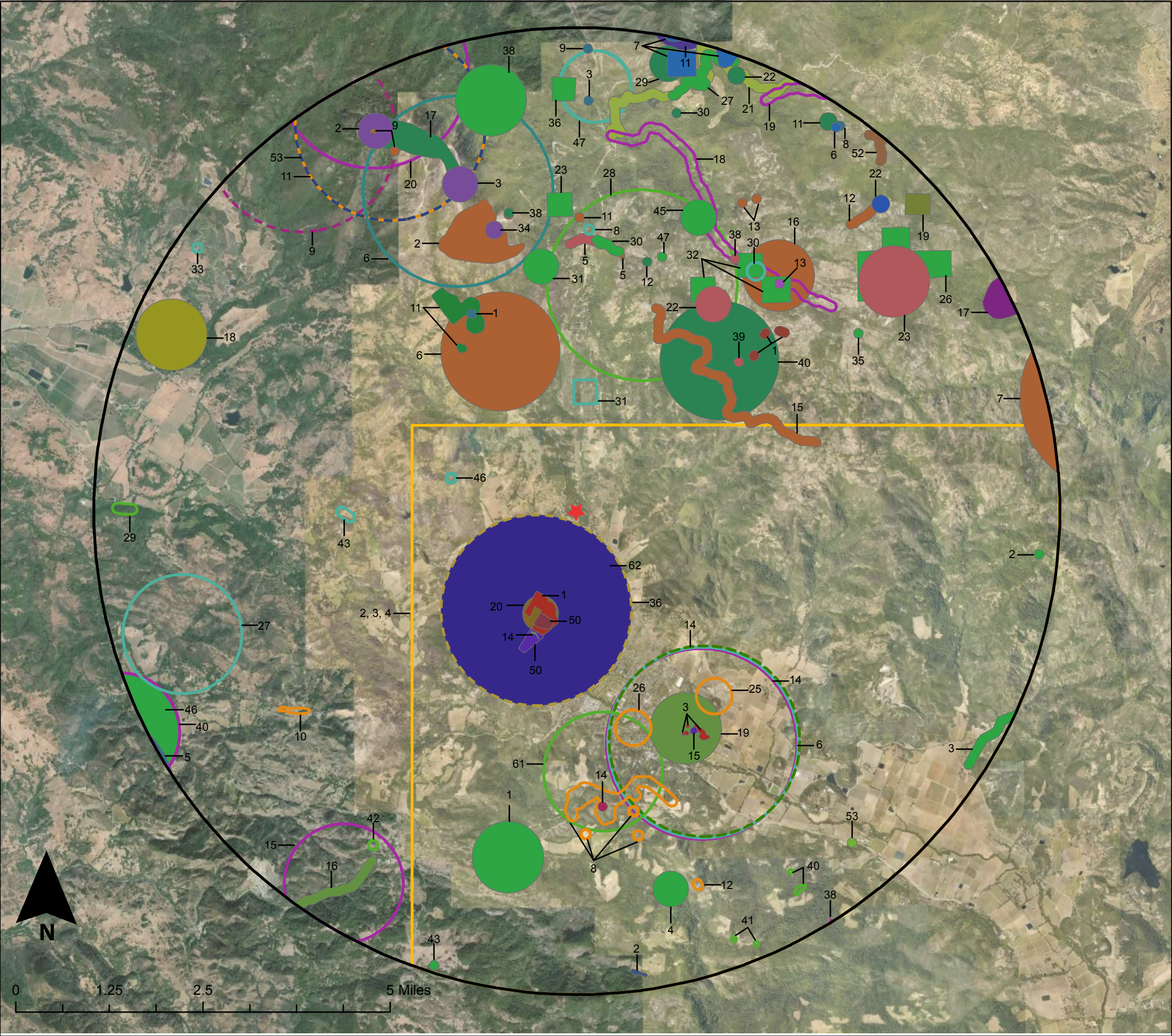
Migratory Nesting Birds; protected by the MBTA

The term “migratory birds” is a general category of birds that essentially includes all species of birds, not just those typically considered migratory. Rock doves, also known as “pigeons” (*Columba livia*) and European starlings (*Sturnus vulgaris*) are the only birds that are not included as part of the Migratory Bird Treaty Act. In general, migratory bird nesting is not tracked by any agency. The project site’s trees, shrubs, and buildings contain potential habitat for nesting migratory birds. Accordingly, a pre-construction survey should be completed to ensure no nests or nesting birds are impacted during construction.

b. Plants

A total 36 special status plant species have CNDDDB recorded occurrences in the 5-mile radius around the study area. These species are described in **Table 2** along with their regulatory status, habitat requirements, and an evaluation of their potential to occur on the site.

The majority of these species are unlikely to occur in the study area due to the absence of suitable habitat or because they were not identified on site during the site review. However, a number of these species have at least some potential to occur in the study area due to the proximity of local occurrences or the availability of suitable habitat. While, the species discussed below have not been observed in the study area, they have at least some likelihood to occur on site.



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FIGURE 3
CNDDDB Special Status
Flora Occurrences

LEGEND:

- ★ Project Location
- 5-Mile Buffer
- Napa false indigo, *Amorpha californica* var. *napensis*, 28, 29, 40, 41, 42, 61
- Konocti manzanita, *Arctostaphylos manzanita* ssp. *elegans*, 2, 3, 34
- Rincon Ridge manzanita, *Arctostaphylos stanfordiana* ssp. *decumbens*, 14
- Jepson's milk vetch, *Astragalus rattanii* var. *jepsonianus*, 53
- narrow-anthered brodiaea, *Brodiaea leptandra*, 14, 15, 18, 19, 20, 38, 40
- Mt. Saint Helena morning glory, *Calystegia collina* ssp. *oxyphylla*, 1, 3, 5, 8, 9
- Rincon Ridge ceanothus, *Ceanothus confusus*, 11, 12, 17, 22, 29, 30, 38, 40
- Calistoga ceanothus, *Ceanothus divergens*, 8, 10, 11, 12, 25, 26
- holly-leaved ceanothus, *Ceanothus purpureus*, 52
- Sonoma ceanothus, *Ceanothus sonomensis*, 22
- pappose tarplant, *Centromadia parryi* ssp. *parryi*, 14, 15, 16
- Coastal and Valley Freshwater Marsh, 50
- serpentine cryptantha, *Cryptantha dissita*, 11
- Greene's narrow-leaved daisy, *Erigeron greenei*, 6
- Loch Lomond button-celery, *Eryngium constancei*, 2
- two-carpellate western flax, *Hesperolinon bicarpellatum*, 9
- Sharsmith's western flax, *Hesperolinon sharsmithiae*, 17
- Santa Lucia dwarf rush, *Juncus luciensis*, 13
- Burke's goldfields, *Lasthenia burkei*, 36
- Colusa layia, *Layia septentrionalis*, 5, 22, 23, 38, 29
- Jepson's leptosiphon, *Leptosiphon jepsonii*, 6, 8, 27, 30, 31, 33, 43, 46, 47
- woolly meadowfoam, *Limnanthes floccosa* ssp. *floccosa*, 1
- Sebastopol meadowfoam, *Limnanthes vincularis*, 53
- Cobb Mountain lupine, *Lupinus sericatus*, 1, 2, 3, 4, 23, 26, 27, 30, 31, 32, 35, 36, 38, 43, 45, 46, 47
- Baker's navarretia, *Navarretia leucocephala* ssp. *bakeri*, 14
- Sonoma beardtongue, *Penstemon newberryi* var. *sonomensis*, 2, 5, 6, 7, 9, 11, 12, 13, 15, 16
- Calistoga popcornflower, *Plagiobothrys strictus*, 2, 3, 4
- Napa blue grass, *Poa napensis*, 1, 3
- California alkali grass, *Puccinellia simplex*, 62
- long-styled sand-spurrey, *Spergularia macrotheca* var. *longistyla*, 19, 20
- Socrates Mine jewelflower, *Streptanthus brachiatus* ssp. *brachiatus*, 11
- green jewelflower, *Streptanthus hesperidis*, 19
- Three Peaks jewelflower, *Streptanthus morrisonii* ssp. *elatus*, 6, 7
- slender-leaved pondweed, *Stuckenia filiformis* ssp. *alpina*, 18
- Napa bluecurls, *Trichostema ruygtii*, 21
- saline clover, *Trifolium hydrophilum*, 18, 50

BY: JPE DATE: 8/4/2020 12:00 PM
PROJECT: 1128 Amici BA
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SOURCE: CNDDDB shapefiles July 2020, ErSI USGS National Map

Table 2
Special Status Plant Species

Scientific name	Common name	Status	Habitat	Potential habitat on-site	Range	Known Range	Elevation	Life Form	Potential for Occurrence On-site	Flowering/ Survey Period
<i>Amorpha californica</i> <i>var. napensis</i>	Napa false indigo	CRPR 1B.2	Broadleafed upland forest (openings), chaparral, cismontane woodland	Marginal	Lake, Monterey, Marin, Napa, Sonoma	Yes	120-2,000 meters	perennial deciduous shrub	None: Marginal habitat and not observed during bloom season survey. Species is perennial and identifiable when not in bloom.	April - July
<i>Arctostaphylos manzanita</i> <i>ssp.elegans</i>	Konocti manzanita	CRPR 1B.3	Volcanic, chaparral, cismontane woodland, lower montance coniferous forest.	Marginal	Colusa, Glenn, Humbolt, Lake, Mendocino, Napa, Shasta, Sonoma, Tehama, Trinity	Yes	395-1,615 meters	Perennial evergreen shrub	None: Marginal habitat and not observed during site survey. Species is perennial, evergreen shrub and identifiable outside of bloom season.	Jan.(March) - May (July)
<i>Arctostaphylos standordiana</i> <i>ssp. decumbens</i>	Rincon Ridge manzanita	CRPR 1B.1	Chaparral (rhyolitic), cismontance woodland	Marginal	Napa, Sonoma	Yes	75-370 meters	Perennial evergreen shrub	None: Marginal habitat and not observed during site survey. Species is perennial, evergreen shrub and identifiable outside of bloom season.	Feb. - April (May)
<i>Astragalus rattanii</i> <i>var. jepsonianus</i>	Jepson's milk-vetch	CRPR 1B.2	Often serpentine, chaparral, cismontane woodland, valley and foothill grassland	Yes	Colusa, Glenn, Lake, Mendocino, Napa, San Benito, Sonoma, Tehama, Yolo	Yes	295-700 meters	Annual herb	Moderate: Potentially suitable habitat present.	March - June
<i>Brodiaea leptandra</i>	Narrow-anthered brodiaea	CRPR 1B:2	Broadleafed upland forest, chaparral, cismontane woodland, lower montane coniferous forest, Valley and foothill grassland	Yes	Lake, Napa, Solano, Sonoma	Yes	30 - 590 meters	Perennial bulb	Unlikely: Potentially suitable habitat present, though not observed during bloom season survey.	May - July
<i>Calystegia collina</i> <i>ssp. oxyphylla</i>	Mt. Saint Helena morning-glory	CRPR 4.2	Serpentine, chaparral, lower montane coniferous forest, valley and foothill grassland	Yes	Lake, Mendocino, Marin, Napa, San Benito, Sonoma	Yes	279-1,010 meters	perennial rhizomatous herb	Moderate: Potentially suitable habitat present.	April - June
<i>Ceanothus confusus</i>	Rincon Ridge ceanothus	CRPR 1B.1	Volcanic or serpentinite, closed-cone coniferous forest, chaparral, cismontane woodland	Yes	Lake, Mendocino, Napa, Sonoma	Yes	75-1,065 meters	Perennial evergreen shrub	Unlikely: Potentially suitable habitat present, though species no observed during site survey. Species is perennial evergreen shrub and is identifiable outside of bloom season.	Feb. - June
<i>Ceanothus divergens</i>	Calistoga ceanothus	CRPR 1B.2	Chaparral (serpentinite or volcanic, rocky)	No	Lake, Napa, Sonoma	Yes	170-950 meters	Perennial evergreen shrub	None: No habitat. Species not observed during site survey.	Feb. - April
<i>Ceanothus purpureus</i>	Holly-leaved ceanothus	CRPR 1B.2	Chaparral, cismontane woodland, volcanic and rocky	Yes	Napa, Shasta, Solano, Sonoma, Trinity	Yes	120 - 640 meters	Perennial evergreen shrub	Unlikely: Potentially suitable habitat present, though species no observed during site survey. Species is perennial evergreen shrub and is identifiable outside of bloom season.	Feb. - June
<i>Ceanothus sonomensis</i>	Sonoma ceanothus	CRPR 1B.2	Chaparral (sandy, serpentinite or volcanic)	No	Lake, Napa, Sonoma	Yes	215-800 meters	Perennial evergreen shrub	None: No habitat. Species not observed during site survey.	Feb. - April
<i>Centromadia parryi</i> <i>spp. parryi</i>	Pappose tarplant	CRPR 1B.2	Chaparral, coastal prarie, meadows and seeps, marshes and swamps (coastal salt), and valley and foothill grassland (vernally mesic)	Marginal	Butte, Colusa, Glenn, Lake, Napa, San Mateo, Solano, Sonoma	Yes	0 - 420 meters	Annual herb	Unlikely: Only marginal habitat present and species not observed during bloom season survey.	May - November
<i>Crypthantha clevelandii</i> <i>var. dissita</i>	Serpentine cryptantha	CRPR 1B.2	Chaparral (serpentinite)	No	Colusa, Lake, Mendocino, Napa, Shasta, Siskiyou, Sonoma	Yes	395-580 meters	Annual herb	None: No habitat.	April - June
<i>Erigeron greenei</i>	Greene's narrow-leaved daisy	CRPR 1B.2	Chaparral serpentinite or volcanic	No	Colusa, Lake, Napa, Sonoma	Yes	80 - 1005 meters	Perennial herb	None: No habitat and species not observed during bloom season survey.	May - September
<i>Erynngium constancei</i>	Loch Lomand button-celery	CRPR 1B.1	Vernal pools	No	Lake, Napa, Sonoma	Yes	460-855 meters	Annual/perennial herb	None: No habitat.	April - June
<i>Hesperolinon bicarpellatum</i>	Two-carpellate western flax	CRPR 1B.2	Chaparral (serpentinite)	No	Lake, Napa, Sonoma	Yes	60-1005 meters	Annual herb	None: No habitat.	May - July
<i>Hesperolinon sharsmithiae</i>	Sharsmith's western flax	CRPR 1B.2	Serpentinite, chaparral	No	Lake, Napa	Yes	270-300 meters	Annual herb	None: No habitat and species not observed during bloom season survey.	May - July
<i>Juncus luciensis</i>	Santa Lucia dward rush	CRBR 1B.2	Chaparral, Great Basin scrub, lower montane coniferous forest, meadows and seeps, vernal pools	Yes	Lassen, Monterey, Modoc, Napa, Nevada, Placer, Plumas, Riverside, Santa Barbara, San Benito, San Diego, Shasta, San Luis Obispo	Yes	300 - 2,040 meters	Annual herb	Unlikely: Habitat present, but species not observed during bloom season survey.	April - July

Table 2
Special Status Plant Species

Scientific name	Common name	Status	Habitat	Potential habitat on-site	Range	Known Range	Elevation	Life Form	Potential for Occurrence On-site	Flowering/ Survey Period
<i>Lasthenia burkei</i>	Burke's goldfields	CRBR 1B.1	Meadows and seeps (mesic), vernal pools	Marginal	Lake, Mendocino, Napa, Sonoma	Yes	15 - 600 meters	Annual herb	Unlikely: Only marginally suitable habitat present.	April - June
<i>Layia septentrionalis</i>	Colusa layia	CRPR 1B.2	Sandy, serpentinite, chaparral, cismontane woodland, valley and foothill grassland	Yes	Butte, Colusa, Glenn, Lake, Mendocino, Napa, Sonoma, Sutter, Tehama, Yolo	Yes	100 - 1,095 meters	Annual herb	Moderate: Potentially suitable habitat present.	April - May
<i>Leptosiphon jepsonii</i>	Jepson's leptosiphon	CRPR 1B.2	Usully volcanic, chaparral, cismontance woodland, valley and foodhill grassland	Yes	Lake, Napa, Sonoma, Yolo	Yes	100 - 500 meters	Annual herb	Moderate: Potentially suitable habitat present.	March - May
<i>Limnanthes floccosa</i> ssp. <i>floccosa</i>	Woolly meadowfoam	CRPR 4.2	Vernally mesic, chaparral, cismontane woodland, valley and foothill grasslands, vernal pools	Marginal	Butte, Lake, Lassen, Napa, Shasta, Siskiyou, Tehama, Trinity	Yes	60 - 1,335 meters	Annual herb	Unlilkely: Only marginally suitable habitat present.	March - May (June)
<i>Limnanthes vinculans</i>	Sebastopol meadowfoam	CRBR 1B.1, SE, FE	Vernally mesic, meadows and seeps, valley and foothill grasslands, vernal pools	Marginal	Napa, Sonoma	Yes	15 - 305 meters	Annual herb	Unlikely: Only marginally suitable habitat present.	April - May
<i>Lupinus sericatus</i>	Cobb Mountain lupine	CRPR 1B.2	Broadleafed upland forest, chaparral, cismontane woodland, lower montane coniferous forest	Yes	Colusa, Lake, Napa, Sonoma	Yes	275 - 1,525 meters	Perennial herb	Moderate: Potentially suitable habitat present.	March - June
<i>Navarretia leucocephala</i> ssp. <i>Bakeri</i>	Baker's navarretia	CRPR 1B.1	Cismontane woodland, lower montane coniferous forest, meadows and seeps, valley and foothill grassland, vernal pools	Yes	Colusa, Glenn, Lake, Lassen, Mendocino, Marin, Napa, Solano, Sonoma, Sutter, Tehama, Yolo	Yes	5-1,740 meters	Annual herb	Moderate: Potentially suitable habitat present.	April - June
<i>Penstemon newberryi</i> var. <i>sonomensis</i>	Sonoma beardtongue	CRBR 1B.3	Chaparral, rocky	No	Lake, Napa, Sonoma	Yes	700 - 1,370 meters	Perennial herb	None: No habitat and not observed during bloom season survey.	April - Aug.
<i>Plagiobothrys strictus</i>	Calistoga popcornflower	CRBR 1B.1, ST, FE	Alkaline areas near thermal springs, meadows and seeps, valley and foothill grassland, veneral pools	Marginal	Napa	Yes	90 - 160 meters	Annual herb	Unlikely: Only marginally suitable habitat present.	March - June
<i>Poa napensis</i>	Napa blue grass	CRPR 1B.1	Alkaline, near thermal springs, meadows and seeps, valley and foothill grassland	Marginal	Napa	Yes	100 - 200 meters	Perennial herb	Unlikely: Only marginally suitable habitat present and not observed during bloom season survey.	May - August
<i>Puccinellia simplex</i>	California alkali grass	CRPR 1B.2	Chenopod scrub, Meadows and seeps, Valley and foothill grassland, Vernal pools	Marginal	Alameda, Butte, Contra Costa, Colusa, Fresno, Glenn, Kings, Kern, Lake, Los Angeles, Madera, Merced, Napa, San Bernardino, Santa Clara, Santa Cruz, San Luis Obispo, Solano,	Yes	2 - 930 meters	Annual herb	Unlikely: Only marginally suitable habitat present.	Mar. - May
<i>Spergularia macrotheca</i> var. <i>longistyla</i>	long-styled sand-spurrey	CRPR 1B.2	Meadows and seeps, Marshes and swamps	No	Alameda, Contra Costa, Napa, Solano	Yes	0 - 255 meters	Perennial herb	None: No habitat.	Feb. - May
<i>Streptanthus brachiatus</i> ssp. <i>brachiatus</i>	Socrated Mine jewelflower	CRPR 1B.2	Usually serpentinite, closed-cone coniferous forest, chaparral	No	Napa, Sonoma	Yes	545 - 1,000 meters	Perennial herb	None: No suitable habitat present	May - June
<i>Streptanthus hesperidis</i>	green jewelflower	CRPR 1B.2	Serpentinite, rocky, chaparral (openings), cismontne woodland	Marginal	Colusa, Glen, Lake, Napa, Sonoma, Yolo	Yes	130 - 760 meters	Annual herb	Unlikely: Marginally suitable habitat present and not observed during bloom season survey.	May - July
<i>Streptanthus morrisonii</i>	Three Peaks jewelflower	CRPR 1B.2	Chaparral, serpentinite	No	Lake, Napa, Sonoma	Yes	90 - 815 meters	Perennial herb	None: No suitable habitat present and not observed during bloom season survey.	June - September.
<i>Stuckenia filiformis</i> ssp. <i>alpina</i>	slender-leaved pondweed	BRPR 2B.2	Marshes and swamps (assorted shallow freshwater)	No	Alameda, Butte,Contra Costa, El Dorado, Lassen, Merced, Mono, Modoc, Mariposa, Nevada, Placer, Santa Clara, Shasta , Sierra , San Mateo, Solano, Sonoma	Yes	300 - 2150 meters	Perennial rhizomatous herb	None: No habitat present in work area.	May - July
<i>Trichostema ruygtii</i>	Napa bluecurls	CRPR 1B.2	Cismontane woodland, chaparral, valley and foothill grassland, vernal pools, lower montane coniferous forest	Yes	Napa, Solano	Yes	30 -680 meters	annual herb	Unlikely: Potentially suitable habitat present, but not observed during bloom season survey.	June - October
<i>Trifolium hydrophilum</i>	saline clover	CRPR 1B.2	Marsh & swamp, valley & foothill grassland, vernal pool, wetland	Yes	Alameda, Contra Costa, Colusa, Lake, Monterey, Napa, Sacramento, San Benito, Santa Clara, Santa Cruz, San Joaquin, San Luis Obispo, San Mateo, Solano, Sonoma, Yolo	Yes	0 - 300 meters	annual herb	Moderate: Potentially suitable habitat present.	April - June

Jepson's milk vetch (*Astragalus rattanii* var. *jepsonianus*) (CRPR 2B.2)

Jepson's milk vetch is a small annual herb reaching between 1.6 and 11.8 inches in height. It is generally found in grasslands and grassy openings in woodland and chaparral habitats. It usually occurs on vertic clay or serpentine soils (Hickman 1993). Jepson's milk vetch generally has 7 to 9 leaflets and 4 to 9 flowers. The flower petals are generally white except for a purple to pink banner tip and keel. It blooms between March and June.

There is one CNDDDB record of Jepson's milk vetch within 5 miles of the study area (occurrence #53). The record is located approximately 4.3 miles northwest of the study area, though the occurrence is mapped as "best guess around Mount St. Helena." The record is based on a 1933 collection.

The study area contains potentially suitable habitat for Jepson's milk vetch. However, there is only one record of the species within 5 miles of the project site and the record is based on a 1933 collection. Because there are no other local or recent observations of Jepson's milk vetch it is unlikely that the species will occur on the project site. However, to ensure the species does not occur on the project site and is not impacted by the proposed project, a bloom season survey as described in the mitigation measures below should be completed for the species.

Mt. Saint Helena morning-glory (*Calystegia collina* ssp. *oxyphylla*) (CRPR 4.2)

Mt. Saint Helena morning-glory is a perennial rhizomatous herb. It generally occurs in open rocky or grassy places such as chaparral, lower montane coniferous forests, and valley and foothill grasslands habitats with serpentinite soils (Hickman 1992). Mt. Saint Helena morning-glory blooms between April and June (CNPS 2020).

There are five CNDDDB records of Mt. Saint Helena morning-glory within 5 miles of the study area. The closest record is approximately 3 miles north of the study area and describes an observation on Red Hill on Mt. Saint Helena in 1988 (occurrence #1). The other four records are located between 3.9 and 5 miles away from the study area. These records describe an observation on Mt. Saint Helena in 1986 (occurrence #3), and observation on Pepperwood Ranch Natural Preserve in 1988 (occurrence #5), and observation at Corona Mine south of Table Mountain in 1992 (occurrence #8) and an observation on the shoulder of Highway 29 in 1997 (occurrence #9).

The project site contains potentially suitable habitat for Mt. Saint Helena morning-glory. As well, there are a number of records of the species within 5 miles of the project site, though these records are all greater than 20 years old. Because of the presence of potentially suitable habitat and local occurrences, there is a potential for Mt. Saint Helena morning-glory to occur on the study area. To ensure that the species is not impacted by the proposed project, a

bloom season survey, as described in the mitigation measures below, should be completed for the Mt. Saint Helena morning-glory.

Colusa Layia (*Layia septentrionalis*) (CRPR 1B.2)

Colusa layia is an annual herb that occurs in chaparral, valley grassland, and foothill woodland habitats with serpentine or sandy soils. It ranges in height from 2.4 to 13.8 inches and has a stem that may be purple-streaked. The leaves are generally lobed and linear to lanceolate or oblanceolate. Colusa layia blooms from April to June with a yellow to brown flower.

There are five CNDDB records of Colusa layia within 5 miles of the study area. The closest record is located just over 3 miles north of the study area. This record is based on a 1986 collection on a chaparral, rhyolite grassy ridgetop (occurrence #39). The next closest occurrence is located approximately 3.2 miles north east of the study area and is based on a specimen believed to have been collected in 1980 (occurrence #22). The other 3 local occurrences are based on a 1940 and 2006 collection from Upper Saint Helena Creek (occurrence #5), based on notes citing a specimen collection thought to be from 1972 at the north summit of Sugarloaf Mountain (occurrence #23), and a 1990 collection and a 2009 observation at the west end of Bear Valley along Van Ness Creek (occurrence #38).

The study area contains potentially suitable habitat for Colusa layia and there are a number of occurrences in the 5 miles around the study area. There is, therefore, the potential for this species to occur on the project site. To ensure the species is not impacted by the proposed project, a bloom season survey for this species should be completed prior to project implementation.

Jepson's leptosiphon (*Linanthus jepsonii*) (CNPS 1B.2)

Jepson's leptosiphon is a small (4 to 12 cm) herb found in chaparral, woodland, and valley and foothill grassland habitats, usually on volcanic soils (CNPS 2020). It has white to pink flowers with exserted stamens, with a blooming period between April and May (Hickman 1993). The plant is endemic to the north coast ranges of California.

There are 9 CNDDB records of Jepson's leptosiphon within 5 miles of the study area. The closest record is located approximately 1.75 miles northwest of the study area. This record describes a 30- by 50-foot patch of Jepson's leptosiphon observed in 2017 (occurrence #46). The second closest observation is located just under two miles north of the study area. This record describes 200-400 plants observed in mixed woodland habitat in 2000 (occurrence #31). The other records within 5 miles of the study area include an observation from Robert Louis Stevenson State Park in 2004 (occurrence #8), a description of the species as locally common in Bear Valley near Van Ness Creek in 2005 (occurrence #30), an observation in 2004 and approximately 38,000 plants seen in 2006 off of Ida Clayton Road west of Mt. Saint Helena (occurrence #33), and approximately 1,000 plants seen in 2018 in annual grassland habitat

with scattered coast live oak (occurrence #43). The other three local records are based on historic collections and include an 1893 collection (occurrence #6), a 1993 collection (occurrence #27), and a 1971 and 1933 collection (occurrence #47).

The study area contains potentially suitable habitat for Jepson's leptosiphon and there are a number of local observations of the species. There is, therefore, the potential for this species to occur on the project site. To ensure the species is not affected by the proposed project, a bloom season survey for this species should be completed prior to project implementation.

Woolly meadowfoam (*Limnanthes floccose ssp. floccose*) (CRPR 4.2)

Woolly meadowfoam is an annual herb that occurs in meadows, chaparral, valley grassland, foothill woodland and wetland-riparian habitats. The stems and leaves are sparsely covered with short, fuzzy fur. It blooms from March to May with a bell to urn shaped flower with a dense coat of hairs.

There is one CNDDDB record of Woolly meadow foam within 5 miles of the study area. This record is located approximately 1.25 miles south of the study area in an area described as chaparral with herbaceous openings in rock outcrops. The record states that 400 plants were observed in 1993.

The study area contains potentially suitable habitat for woolly meadowfoam and there is a locally recorded observation of the. Therefore, there is a moderate potential for the species to occur on the project site. To ensure the species is not affected by the proposed project, a bloom season survey for this species of the project site should be completed prior to project implementation.

Sebastopol meadowfoam (*Limnanthes vinculans*); (CRPR 1B.1, SE)

Sebastopol meadowfoam is a California and federally listed endangered plant. It is a small annual herb that occurs in foothill woodland, freshwater wetlands, vernal pools, and wetland-riparian habitats. It is erect to ascending with small narrowly obovate leaflets. Sebastopol flowers from April to May and has small bell-shaped to rotate white flowers.

There is one CNDDDB record of Sebastopol meadowfoam within 5 miles of the study area (occurrence #53). This record is located just under 5 miles southeast of the study area in an area described as a vernal swale. The record describes an unknown number of plants observed in 2009 and 2010 and over 5,000 plants observed in 2006. The record also notes that atypical plants are present at this location and maybe a hybrid with *Limnanthes douglasii*.

The study area contains a small amount of potentially suitable habitat for the species. Though there is only one occurrence within 5 miles of the study area, there is still some potential for

the species to occur in the project site. Therefore, a bloom season survey for this species should be completed to ensure the species is not impacted by the proposed project.

Cobb Mountain lupine (*Lupinus sericatus*); (CRPR 1B.2)

Cobb Mountain lupine is a perennial herb that is native and endemic to California. It occurs in chaparral, foothill woodland, and yellow pine forest habitats. It ranges in height from 0.5 to 1.5 feet and is silver to gray-green in color. The stem is generally erect and the leaf is cauline and clustered near the base with 4 to 7 widely spoon-shaped leaflets. Cobb Mountain lupine blooms between March and June with small purple to violet flowers.

There are 17 CNDDDB records of Cobb Mountain lupine within 5 miles of the study area. The closest record is approximately 2.5 miles north of the study area on Mount Saint Helena (occurrence #31). This record describes a sighting in 1951-1952 and a collection in 1940. The next closest record is located just over 2.5 miles north of the study area in the vicinity of Upper Van Ness Creek in the vicinity of Bear Valley (occurrence #32) and is based on an observation between 1978 and 1980. Nine of the other recorded occurrences are based on collections or observations prior to 1990 and 4 are from prior to 2000. There are two records from within the last twenty years: one from northeast of Table Rock just outside of Robert Louis Stevenson State Park in 2016 (occurrence #47) and one from along Oat Hill Mine Road in 2005 (occurrence #35).

The study area contains potentially suitable habitat for Cobb Mountain Lupine. As well, there are numerous occurrences of the species within 5 miles of the study area. For these reasons, there is the potential for this species to occur on the project site. Therefore, a pre-construction bloom season survey of the project site should be completed to ensure the species is not impacted by the proposed project.

Baker's navarretia (*Navarretia leucocephala ssp. bakeri*) (CNPS 1B.1)

Baker's navarretia is an annual herb that is native and endemic to California. It is found in a variety of habitats including cismontane woodland, lower montane coniferous forest, meadows and seeps, valley and foothill grassland, and vernal pools. It almost always occurs under wetland conditions in elevations between 5 and 1740 meters. The plant is often stout with a large inflorescence of numerous white, five-petal flowers and spiky bracts. It has a blooming period from April to July.

There is one CNDDDB record of Baker's navarretia within 5 miles of the study area. This record is located just under 2 miles south of the study area in an area described as a dry bed of a winter pond/vernal pool (Occurrence #14). The record is based on a 1903 collection and is considered extirpated.

Though the study area contains potentially suitable habitat for Baker's navarretia, the only locally known occurrence is extirpated. Because there are no local occurrences it is unlikely the species will occur on the project site. However, because the site contains potentially suitable habitat, a pre-construction bloom season survey of the project site should be completed to ensure the species is not impacted by the proposed project.

Calistoga popcornflower (*Plagiobothrys strictus*); (CRPR 1B.1)

Calistoga popcornflower is a California threatened and a federally endangered plant species. It is an annual herb that occurs in pools and swales adjacent to hot springs and geysers and in annual grassland, mixed evergreen, and wetland-riparian habitats. It prefers soils with high concentrations of boron, arsenic, and sulfates. It reaches 4 to 16 inches in height and has a slender stem and narrow leaves. It blooms from March to June within a slender, unbranched inflorescence and a small white flower

There are three CNDDDB records of Calistoga popcornflower within 5 miles of the project site. The locations of each of these records has been suppressed, but they are shown as occurring within the Calistoga Quad, which is the same quad as the study area. The locations of the records are described as a geyser-fed swale (occurrence #2) and a wildflower field in open grassland (occurrence #3). There is no location description for the third record (occurrence #4).

The study area contains a small amount of potentially suitable habitat for Calistoga popcorn flower and there are three known occurrences within the same quad as the study area. However, the species is very rare and occurs only under specific conditions. The species is therefore unlikely to occur on the project site. However, to ensure the species is not impacted by the proposed project, a pre-construction bloom season survey of the project site should be completed to ensure the species is not impacted by the proposed project.

California alkali grass (*Puccinellia simplex*); (CRPR 1B.2)

California alkaligrass is an annual grass that occurs in valley grassland, meadows, seeps, vernal pools, chenopod scrub and wetland-riparian habitats that are generally alkaline or vernal mesic. The leaf is a cauline blade generally rolled and between 0.7 to 2 mm wide when flat. It blooms from March to May with a rounded to weakly keeled spikelet.

There is one CNDDDB records of California alkali grass within 5 miles of the study area. This record is located less than 0.5 miles south of the study area, though the area has been mapped broadly as the exact location is unknown. The record is based on a 1949 and a 1955 collection and states that the record "needs fieldwork." The record describes California alkali grass as growing along the north edge of a meadow supplied with water by a nearby hot spring.

Though the study area contains potentially suitable habitat for California alkali grass, there is only one roughly mapped and historic record of the species within 5 miles of the study area. The species is therefore unlikely to occur on the project site. However, to ensure that the species is not affected by the proposed project, a pre-construction bloom season survey should be completed of the project site.

Saline clover (*Trifolium hydrophilum*) (CNPS 1B.2)

Saline clover is a small, annual herb endemic to California. It is found in all central coast counties, from San Luis Obispo County to Sonoma County, except in San Francisco County. These counties include Alameda, Monterey, San Benito, San Luis Obispo, Napa, San Mateo, Santa Cruz, and Sonoma counties. Solano and possibly Colusa are the only inland counties with reported occurrences of this species (CNPS 2008). It is found in marshes and swamps, valley and foothill grassland, and often surrounding vernal pools.

The species has clover-like leaves with three leaflets 0.5 to 2 cm in length. The stipules of the upper leaves are tipped with bristles. The white-tipped, pink-purple flowers are 6.5 to 9 mm long and clustered in small heads that are 0.5 to 1.5 cm in diameter. It blooms from April to June. The upper petal, or banner, appears inflated. It encloses the 2 to 3 mm long fruit (legume) as it ripens (Hickman 1993).

There are two CNDDDB recorded occurrences of saline clover within 5 miles of the study area. Both occurrences are located south of the study area. One is approximately 1.25 miles away (occurrence #50) while the other is approximately 2.5 miles away (occurrence #18). The closer occurrence describes over 100 plants seen in 1996 and states that the plants were extant in 2000. The second occurrence describes an unknown number of plants observed in 2012 in a freshwater marsh.

The study area contains a small amount of potentially suitable habitat for saline clover. As well, there are two nearby recorded observations of the species. Though the species was not observed during the initial site survey, there is still potential for it to occur on site, as the survey was completed outside of the species bloom season. Therefore, a bloom season survey for this species should be completed at the project site to ensure the species is not impacted by the proposed project.

3. Conclusion

The western pond turtle is the only special status wildlife species observed or known to occur within the study area. None of the other wildlife species, nor any of the special status plant species were observed or are known to occur within the study area. The study area consists of predominantly open space with an agricultural pond, driveway and several buildings. The study area is known to support the western pond turtle and provides potential habitat for

nesting birds and raptors and roosting bats. As well, there is a relatively limited potential for a number of special status plant species to occur within the study area. Therefore, avoidance measures for the western pond turtle, a pre-construction survey for birds and raptors and roosting bats, and a pre-construction, bloom season survey for special status plant species should be completed to ensure that these species are not impacted by the proposed project.

B. Special-Status Habitats

1. Wetlands and Waters

a. Jurisdictions

As defined by the Army Corps of Engineers (Corps), “wetlands” are areas periodically or permanently saturated by surface or groundwater and typically support vegetation adapted to life in saturated (hydric) soil. Wetlands are recognized as important features on a regional and national level due to their high inherent value to fish and wildlife, use as storage areas for storm and floodwaters, promotion of groundwater recharge, and their water filtration and purification functions. “Other waters” include tributaries or drainage ditches which exhibit perennial or ephemeral flow to a navigable waterway, wetland, or other significant water feature. Other waters may not necessarily be wetlands.

b. Delineation Methods

Boundaries between jurisdictional areas and uplands were investigated using the routine on-site assessment procedure, Section D, Subsection 2, page 57 of the 1987 “Corps of Engineers Wetlands Delineation Manual” (Environmental Laboratory 1987; hereafter the “Delineation Manual”) as modified by the new Interim Arid West Supplement to the Delineation Manual (Environmental Laboratory 2006; hereafter the AWS). Dominant plant species, soil characteristics, and hydrology indicators were examined to distinguish uplands from jurisdictional areas.

c. Results

The study area contains two jurisdictional features: the agricultural pond and the ephemeral drainage below the pond. These features are both outside of the project limits and will not be impacted by the proposed project.

2. Other Special Status Habitats

There are no other special status habitats on the project site. The CNDDDB has one special status habitat, coastal and valley freshwater marsh, mapped within 5 miles of the project site. Coastal and valley freshwater marshes are wetlands that are frequently or continually

inundated with water and are characterized by emergent soft-stemmed vegetation that is adapted to saturated soils. There are no coastal or valley freshwater marshes located within the study area.

3. Wildlife Movement Corridors

Wildlife corridors are generally described as pathways or habitat linkages that connect discrete areas of natural open space otherwise separated or fragmented by topography, changes in vegetation, and other natural or human induced factors such as urbanization. The fragmentation of natural habitat creates isolated “islands” of vegetation that may not provide sufficient area or resources to accommodate sustainable populations for a number of species and thus, adversely affecting both genetic and species diversity. Corridors often partially or largely eliminate the adverse effects of fragmentation by 1) allowing wildlife to move between remaining habitats to replenish depleted populations and increase the gene pool available; 2) providing escape routes from fire, predators, and human disturbances, thus reducing the risk that catastrophic events (such as fire or disease) will result in population or species extinction; and 3) serving as travel paths for individual animals moving throughout their home range in search of food, water, mates, and other needs, or for dispersing juveniles in search of new home ranges.

The study area is located several miles outside of the Calistoga City limits within a large swath of open space. Though the property and surrounding area is largely undeveloped, the property is located within a curve of Highway 29 which bounds the property to the south, west and northwest. Highway 29 serves as an impediment to wildlife movement due to the associated traffic and noise. Nevertheless, the property is located within what is likely part of a north to south wildlife movement corridor that is utilized by animals traveling between Mt. Saint Helena and the Los Padres State Forest.

Though numerous animals likely pass through the study area, there are numerous other paths and corridors through the region. As well, the study area’s proximity to Highway 29 makes it a less desirable path for wildlife. Furthermore, the proposed project will occur in parts of the Amici Cellars property that are already being heavily used as part of the winery operations, i.e. adjacent to the winery building. Due to the heavy disturbance and human presence, these areas are less likely to be utilized as a wildlife corridor. Therefore, the proposed project is not expected to have an impact on wildlife movement corridors.

IV. BIOLOGICAL RESOURCES

A. Regulatory Setting and Federal Framework

1. Federal Endangered Species Act

The Federal Endangered Species Act (FESA) forms the basis for the federal protection of threatened or endangered plants, insects, fish and wildlife. FESA contains four main elements, they are as follows:

1. Section 4 (16 USCA §1533): Species listing, Critical Habitat Designation, and Recovery Planning: outlines the procedure for listing endangered plants and wildlife.
2. Section 7 (§1536): Federal Consultation Requirement: imposes limits on the actions of federal agencies that might impact listed species.
3. Section 9 (§1538): Prohibition on Take: prohibits the “taking” of a listed species by anyone, including private individuals, and State and local agencies.
4. Section 10: Exceptions to the Take Prohibition: non-federal agencies can obtain an incidental take permit through approval of a Habitat Conservation Plan.

In the case of salt water fish and other marine organisms, the requirements of FESA are enforced by the National Marine Fisheries Service (NMFS). The USFWS enforces all other cases. Section 9 of FESA as amended, prohibits the “take” of any fish or wildlife species listed under FESA as endangered. Under Federal regulation, “take” of fish or wildlife species listed as threatened is also prohibited unless otherwise specifically authorized by regulation. “Take,” as defined by FESA, means “to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct.” “Harm” includes not only the direct taking of a species itself, but the destruction or modification of the species’ habitat resulting in the potential injury of the species. As such, “harm” is further defined to mean “an act which actually kills or injures wildlife; such an act may include significant habitat modification or degradation where it actually kills or injures wildlife by significantly impairing essential behavioral patterns, including breeding, feeding or sheltering” (50 CFR 17.3).

Section 9 applies to any person, corporation, federal agency, or any local or State agency. If “take” of a listed species is necessary to complete an otherwise lawful activity, this triggers the need to obtain an incidental take permit either through a Section 7 Consultation as discussed further below (for federal actions or private actions that are permitted or funded by a federal agency), or requires preparation of a Habitat Conservation Plan (HCP) pursuant to Section 10 of FESA (for state and local agencies, or individuals, and projects without a federal “nexus”).

Section 7(a)(2) of the Act requires that each federal agency consult with the USFWS to ensure that any action authorized, funded or carried out by such agency is not likely to jeopardize

the continued existence of an endangered or threatened species or result in the destruction or adverse modification of critical habitat for listed species. The Section 7 consultation process applies only to actions taken by federal agencies, or actions by private parties that require federal agency permits, approval, or funding (for example, a private landowner applying to the Corps for a permit). Section 7's consultation process is triggered by a determination of the "action agency" (i.e., the federal agency that is carrying out, funding, or approving a project) that the project "may affect" a listed species or critical habitat. If an action is likely to adversely affect a listed species or designated critical habitat, formal consultation with the USFWS is required.

2. Federal Migratory Bird Treaty Act (FMBTA)

The Migratory Bird Treaty Act of 1918 (16 U.S.C. §§ 703-712, July 3, 1918, as amended 1936, 1960, 1968, 1969, 1974, 1978, 1986 and 1989) makes it unlawful to "take" (kill, harm, harass, shoot, etc.) any migratory bird listed in Title 50 of the Code of Federal Regulations, Section 10.13, including their nests, eggs, or young. Migratory birds include geese, ducks, shorebirds, raptors, songbirds, wading birds, seabirds, and passerine birds (such as warblers, flycatchers, swallows, etc.).

3. Federal Clean Water Act

Section 404

Pursuant to Section 404 of the Clean Water Act (33 U.S.C. 1344), the U.S. Army Corps of Engineers (USACE) regulates the discharge of dredged or fill material into "waters of the United States" (33 CFR Part 320 *et seq.*). This requires project applicants to obtain authorization from the USACE prior to discharging dredged or fill material into any water of the United States. The "waters of the United States" are defined in federal regulations at 33 CFR section 328.3, and may include wetlands, ponds, drainages, creeks, streams, and other types of waterbodies, depending on whether any such aquatic feature meets current jurisdictional standards.

To remain in compliance with Section 404 of the Clean Water Act, project proponents and property owners (applicants) are required to acquire authorization from the USACE prior to discharging or otherwise impacting "waters of the United States." This authorization is typically given by reference to compliance with an existing Nationwide Permit(s) or by issuance of a project-specific Individual Permit.

Section 401

Prior to issuance by a Section 404 authorization by the USACE, Section 401 of the federal Clean Water Act requires the State Water Resources Control Board (SWRCB) and the Regional Water Quality Control Boards (RWQCB) to certify, conditionally certify, or waive certification on the question of whether issuance of the USACE permit will violate water quality standards of the State. This certification (or waiver thereof) applies only to the proposed impacts to the "waters of the United States" that are at issue in the proposed Section 404 permit. Potential

impacts to "waters of the State" that may not be jurisdictional for the USACE are addressed under the RWQCB's Porter-Cologne Water Quality Control Act statutory authority (see below).

B. State Framework

1. California Endangered Species Act

In 1984, the state legislated the California Endangered Species Act (CESA) (Fish and Game Code §2050). The basic policy of CESA is to conserve and enhance endangered species and their habitats.

If proposed projects would result in impacts to a State listed species, an "incidental take" permit pursuant to §2081 of CDFG Code would be necessary (versus a Federal incidental take permit for Federal listed species). No §2081 permit may authorize the take of a species for which the Legislature has imposed strict prohibitions on all forms of "take."

State and federal incidental take permits are typically only authorized if applicants are able to demonstrate that impacts on the listed species in question are unavoidable, and can be mitigated to an extent that the reviewing agency can conclude that the proposed impacts would not jeopardize the continued existence of the listed species under review.

2. California Fish and Game Code

Section 4700

In accordance with California Fish and Game Code, Section 4700, "fully protected" mammals or parts thereof may not be taken or possessed (held in captivity) at any time (a) (1), except as provided in Section 2081.7. No provision of this code or any other law shall be construed to authorize the issuance of permits or licenses to take any fully protected mammal, and no permits or licenses heretofore issued shall have any force or effect for that purpose. However, subject to certain notice requirements, the department may authorize the taking of those species for necessary scientific research, including efforts to recover fully protected, threatened, or endangered species.

Sections 3503, 3503.5, 3511, and 3513

CDFG Code §§ 3503, 3503.5, 3511, and 3513 prohibit the take, possession, or destruction of the nest or eggs of any bird. Disturbance that causes nest abandonment and/or loss of reproductive effort (killing or abandonment of eggs or young) is considered "take." Take of any migratory nongame bird is also prohibited, except in compliance with rules promulgated under the Migratory Bird Treaty Act.

All raptors (that is, hawks, eagles, owls) their nests, eggs, and young are protected under California Fish and Game Code (§3503.5). Additionally, "fully protected" birds, such as the white-tailed kite (*Elanus leucurus*) and golden eagle (*Aquila chrysaetos*), are protected under CDFG Code (§3511). "Fully protected" birds may not be taken or possessed (that is, kept in captivity) at any time.

Section 1602

Pursuant to Section 1602 of the Fish and Game Code, CDFG regulates activities that divert, obstruct, or alter stream flow, or substantially modify the bed, channel, or bank of a stream. CDFG's jurisdiction includes the outer extent of any riparian vegetation associated with the stream. Any proposed activity in a natural stream channel that would substantially adversely affect an existing fish and/or wildlife resource, would require entering into a Streambed Alteration Agreement (SBAA) with CDFG prior to commencing work in the stream.

3. Porter-Cologne Water Quality Act

The Porter-Cologne Water Quality Control Act, Water Code § 13260, requires that "any person discharging waste, or proposing to discharge waste, that could affect the waters of the State to file a report of discharge" with the RWQCB through an application for waste discharge (Water Code Section 13260(a)(1). The SWRCB and its several RWQCBs have interpreted this authority to extend to proposed fills of "waters of the State" that include all "waters of the United States" that are subject to the jurisdiction of the USACE, and any other "isolated" waters that are beyond the reach of the USACE claim of jurisdiction.

C. Applicable Local Restrictions

1. Napa County Code

18.108.026 - General provisions—Wetlands.

Construction of main or accessory structures, earthmoving activity, land clearing or agricultural uses of land as defined by Section 18.08.040 shall be set back 50 feet from the delineated wetland boundary. In limited circumstances, the 50-foot setback may be reduced if recommended by a qualified professional biologist and approved by the director.

D. Environmental Analysis

1. CEQA Thresholds of Significance

According to Appendix G of the CEQA Guidelines, the proposed project would have significant impacts on biological resources if it would:

1. 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 CDFG or U.S. Fish and Wildlife Service (USFWS).

2. Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, and regulations or by CDFG or USFWS.
3. Have a substantial adverse effect on federally protected "wetlands" or "Waters of the U.S." as defined by Section 404 of the Clean Water Act or "Waters of the State" as defined by the Porter-Cologne Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means.
4. 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.
5. Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance.
6. Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan.

V. POTENTIAL IMPACTS AND MITIGATION MEASURES

A. Less Than Significant Impacts

1.0 Loss of Oak Woodland Habitat

The proposed project will result in the loss of marginal amounts of oak woodland habitat. Minimal oak woodland habitat loss will occur adjacent to the existing winery and no significant oak trees will be removed. The loss of this habitat is not a significant impact as there is an abundance of oak woodland habitat in the region and the project will result in marginal areas of loss. Similarly, impacts to common wildlife species that may potentially use this habitat are not significant as the loss is so small and these species are capable of using adjacent lands which contain a large quantity this habitat.

2.0 Impacts within 50-foot Pond Setback

The proposed project requires minor work within the agricultural pond's 50-foot setback. The work is necessary to update the well and pond's fire pump and emergency generator. This work is minor and will occur outside the limits of the pond in areas that have already been modified and contain existing well infrastructure. The impacts within the setback are not significant as the area has already been heavily modified and there is similar and higher quality habitat around the pond. Similarly, impacts to common wildlife species that may potentially use this area are not significant as the potential impacts are so small and these species are capable of using adjacent lands which contain similar or higher quality habitat.

Because the proposed work is located within the setback, the applicant may seek an exemption or exception from the County for this work.

B. Potentially Significant Impacts Before Mitigation

Special Status Wildlife and Plant Species

1.0 The Study Area contains habitat that could potentially support nesting raptors and other birds. Though the work area is small, any building, tree, or shrub removal or other project related activities could have a potentially significant impact on nesting birds.

Impact Analysis

Suitable potential nesting habitat for raptors, as well as other migratory nesting birds, is present on, or adjacent to, the study area. These birds are protected under the Migratory Bird Treaty Act (50 CFR 10.13) and their nest, eggs, and young are protected under California CDFG

Code §§3503, 3503.5, 3800, and 3513. Any project-related impacts on the nesting success of these species would be considered a significant adverse impact. These impacts could be mitigated to a level considered less than significant by Mitigation Measure 1.0-1.

Mitigation Measures

- 1.0-1 If construction related work would commence anytime during the nesting/breeding season of raptors or other bird species listed in the Migratory Bird Treaty Act (typically February through September 15), a pre-construction survey of the project vicinity for nesting birds should be conducted. This survey should be conducted by a qualified biologist (experienced with the nesting behavior of bird species of the region) within 7 days prior to the commencement of construction activities that would occur during the nesting/breeding season. The intent of the survey should be to determine if active nests are present within or adjacent to the construction zone, that is within approximately 250 feet. The surveys should be timed such that the last survey is concluded no more than one week prior to initiation of construction. If ground disturbance activities are delayed following a survey, then an additional pre-construction survey should be conducted such that no more than one week will have elapsed between the last survey and the commencement of ground disturbance activities.

If active nests are found in areas that could be directly or indirectly affected by the project, a no-disturbance buffer zone should be created around active nests during the breeding season or until a qualified biologist determines that all young have fledged. The size of the buffer zones and types of construction activities restricted within them should be determined through consultation with the CDFW depending on the species, taking into account factors such as the following:

- Noise and human disturbance levels at the construction site at the time of the survey and the noise and disturbance expected during the construction activity;
- Distance and amount of vegetation or other screening between the construction site and the nest; and
- Sensitivity of individual nesting species and behaviors of the nesting birds.

The buffer zone around an active nest should be established in the field with orange construction fencing or another appropriate barrier and construction personnel should be instructed on the sensitivity of nest areas. The qualified biologist should serve as a construction monitor during those periods when construction activities would occur near active nest areas of special status bird species to ensure that no impacts on these nests occur.

Level of Significance After Mitigation: Less Than Significant

2.0 Development of the project could have a potentially significant impact on the western pond turtle

Impact Analysis

The western pond turtle was found to occur within the property's agricultural pond. Though the pond will not be impacted by the proposed project, the western pond turtle could travel from the pond into the adjacent work areas and construction related activities could result in the loss of individual western pond turtles. The loss of a western pond turtle would be considered a significant adverse impact. This potential impact could be mitigated to a level considered less than significant by implementing Mitigation Measure 2.0-1 and 2.0-2.

Mitigation Measures

- 2.0 -1 A qualified biologist shall conduct a training program for all personnel working on the proposed project. The program shall consist of a presentation that includes a description of the western pond turtle, its biology and habitats, the importance of this species and their habitat and the general measures that are being implemented to conserve the species as they relate to the project, as well as the consequences and potential fines or penalties of taking a special status species. Interpretation shall be provided for non-English speaking workers.

If at any point during construction, a western pond turtle is identified within the project work area, all work in the area shall stop until the species leaves the area on its own accord.

- 2.0-2 Prior to construction activities, wildlife exclusionary fencing shall be installed along the edge of all work areas within 50 feet of the agricultural pond. The fencing shall be installed such that it guides wildlife movement away from the project work area. A qualified biologist shall monitor the installation of the wildlife exclusionary fencing.

The fencing will be standard fencing at least forty-two (42) inches in height that will be trenched 6 inches into the soil. The soil will then be compacted against both sides of the fence to prevent wildlife from gaining access underneath. Stakes to support the fencing will be placed on the inside of the fence facing the development. The fence will be inspected occasionally by a qualified biologist for holes, gaps, or access points, which shall be repaired upon discovery.

Level of Significance After Mitigation: Less Than Significant

3.0 The proposed project could have a potentially significant adverse impact on special-status plant species.

Impact Analysis

The study area provides potentially suitable habitat for 11 special status plant species. These plants include: Jepson's milk-vetch (*Astragalus rattanii* var. *jepsonianus*), Mt. Saint Helena morning-glory (*Calystegia collina* ssp. *oxyphylla*), Colusa layia (*Layia septentrionalis*), Jepson's leptosiphon (*Leptosiphon jepsonii*), woolly meadowfoam (*Limnanthes floccose* ssp. *floccose*), Sebastopol meadowfoam (*Limnanthes vinculans*), Cobb Mountain lupine (*Lupinus sericatus*), Baker's navarretia (*Navarretia leucocephala* ssp. *Bakeri*), Calistoga popcornflower (*Plagiobothrys strictus*), California alkali grass (*Puccinellia simplex*), and saline clover (*Trifolium hydrophilum*).

None of these plants have been observed within the study area, however, a late spring/early summer plant survey is needed to ensure the presence/absence of these special status plant species. The project could, therefore, result in the loss of plants of these species if this bloom period survey is not completed. Therefore, the following measures shall be implemented to reduce potential impacts to these special status species.

Mitigation Measures

- 3.0-1 A qualified biologist shall complete an April to early June survey for special-status plant species prior to initiation of project activities. The survey shall be completed during the appropriate blooming period for the species likely to occur on site. These surveys shall be in compliance with all CDFW (2009), USFWS (1996), and CNPS (2001) published survey guidelines.

If the survey finds that there are no special-status plants on the property that would be impacted or within the proposed project site, then there would be no further mitigation and the project may proceed, provided all other applicable permits and authorizations are obtained for the project.

If special-status plant species are found, populations will be mapped and enumerated. If any populations are found within the proposed work area, they shall be flagged and project development plans shall consider avoidance to the extent practicable. If avoidance is not practicable while otherwise obtaining the project's objectives, then other suitable measures shall be implemented as detailed below.

A qualified biologist shall complete an inventory and analysis of the on-site population(s) of the species within and outside of the work area to determine the extent and significance of the potential impacts that will occur as a result of the project. This analysis shall be presented to the County as part of their review of the

project. If a significant impact will occur as a result of the project work then a mitigation plan shall be developed and approved by the County for implementation of the following measures prior to site disturbance. The mitigation plan shall include the following elements:

1. Prior to construction within the project area, a qualified botanist shall collect the seeds, propagules, and top soils, or other part of the plant that would ensure successful replanting of the population elsewhere. The seeds, propagules, or other plantable portion of all plants shall be collected at the appropriate time of the year.
2. At least 2/3 of the seeds, propagules, or other plantable portion of all plants shall be planted at the appropriate time of year (late-fall months). Half of the seeds and top soils collected shall be appropriately stored and propagated at a native plant nursery to ensure germination. This material will be planted at an approved and protected area during the appropriate season. Planting location, timing, collection methods etc... will be detailed in a mitigation plan.
3. The applicant shall hire a qualified biologist to conduct annual monitoring surveys of the transplanted plant population for a five-year period and shall prepare annual monitoring reports reporting the success or failure of the transplanting efforts. These reports shall be submitted to the County no later than December 31st each monitoring year.
4. These steps shall be implemented prior to site disturbance.

A CNDDDB form shall be filled out and submitted to CDFW for any special-status plant species identified within the project site.

In lieu of the above prescribed mitigation, as allowed in writing by the County, mitigation requirements may be satisfied via the purchase of qualified mitigation credits or the preservation of offsite habitat.

When implemented, these measures would reduce potentially significant adverse impacts on special-status plant species to a level considered less than significant.

Level of Significance After Mitigation: Less Than Significant

4.0 The proposed project could have a potentially significant adverse impact on special-status bat species.

Impact Analysis

The study area provides potentially suitable habitat for 3 special status bat species: pallid bat (*Antrozous pallidus*), Townsend's big-eared bat (*Corynorhinus townsendii*), and Yuma myotis (*Myotis yummanensis*). The removal of buildings and trees from the project site could have a potentially significant impact on bat species. Therefore, the following mitigation measures shall be implemented to reduce potential impacts to these special status species.

Mitigation Measures

4.0-1 For construction activities between October 16 and August 14: Prior to the commencement of construction activities, a qualified biologist shall conduct a focused survey to determine the presence/absence of any special status bat species. If bats are found then a plan for removal or exclusion between October 16 and August 14 will be developed by a qualified biologist and in consultation with CDFW.

For construction activities between August 15 and October 15: If trees are to be removed between August 15 and October 15, they will be trimmed and removed in a two-phased system conducted over two consecutive days under the supervision of a qualified biologist. The first day (afternoon), limbs, branches and trunks without cavities, crevices and deep bark fissures are removed by chainsaw only. Limbs and trunks with cavities, crevices and bark fissures would be avoided. On the second day, the remainder of the tree may be removed.

Level of Significance After Mitigation: Less Than Significant

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APPENDIX A

Project Plans

PROJECT STATEMENT

THESE PLANS WERE PREPARED TO SUPPORT A MODIFICATION OF USE PERMIT #98583-UP AND #98584-VAR. THE REQUESTED MODIFICATIONS INCLUDE AN INCREASE IN:
-PRODUCTION (FROM 20,000 TO 30,000 GALLONS OF ANNUAL WINE PRODUCTION)
-EMPLOYEES
-VISITATION
-EVENTS

FOLLOWING IS A LIST OF ASSOCIATED REPORTS AND REQUESTS TO SUPPORT THIS MODIFICATION WHICH WERE PREPARED BY THIS OFFICE:
-STORMWATER CONTROL PLAN
-WASTEWATER FEASIBILITY REPORT
-WATER AVAILABILITY REPORT
-WATER SYSTEM FEASIBILITY REPORT

THESE PLANS AND REPORTS SHALL BE CONSIDERED IN COMPLETE TO SUPPORT THE MODIFICATION APPLICATION AND SHALL NOT BE USED FOR ANY OTHER PURPOSES INCLUDING, BUT NOT LIMITED TO, CONSTRUCTION.

PROJECT PERMITS

DATE:	PERMIT #:	DESCRIPTION:
09/26/2019	P19-00390	USE PERMIT MODIFICATION (THIS SET OF PLANS) (UNDER REVIEW)
03/26/2019	P19-00108	USE DETERMINATION (UNDER REVIEW)
05/22/2018	E18-00421	NEW WELL CLASS 1 (ISSUED)
05/22/2018	E18-00420	EXISTING WELL DEMO (FINALED)
05/21/2015	E15-00373	SITE EVALUATION (FINALED)

OTHER PERMITS MAY BE RELATED TO THIS PROJECT. DELTA CONSULTING & ENGINEERING IS NOT RESPONSIBLE FOR ANY PREVIOUS PERMITTING.

STORMWATER REPORT NOTES

THE REPORTS REFERENCED BELOW HAVE BEEN PREPARED FOR THIS PROJECT BY DELTA CONSULTING & ENGINEERING TO ACCOMPANY THE USE PERMIT MODIFICATION. THE REPORT OUTLINES THEORETICAL CONSTRUCTION SEDIMENT AND EROSION MEASURES TO BE IMPLEMENTED AFTER CONSTRUCTION IS COMPLETE. AN EROSION AND SEDIMENT CONTROL PLAN (ESCP) SHALL BE INCLUDED WITH THE CONSTRUCTION PLANS AT THE TIME OF BUILDING PERMIT.

THIS PROJECT REQUIRES FILING OF A STORM WATER POLLUTION PREVENTION PLAN (SWPPP) WITH THE STATE OF CALIFORNIA STORM WATER MULTIPLE APPLICATION AND REPORT TRACKING SYSTEMS (SMARTS) PRIOR TO ISSUANCE OF ANY CONSTRUCTION PERMIT.

NAPA COUNTY PLANNING, BUILDING, AND ENVIRONMENTAL SERVICES:
A STORMWATER CONTROL PLAN (SCP) DATED SEPTEMBER 15, 2019 HAS BEEN PREPARED FOR THIS PROJECT. THE REPORT WAS MODIFIED ON MARCH 10, 2020.

SURVEY/TOPOGRAPHY NOTES

- THE BOUNDARY ON THESE DRAWINGS DOES NOT REPRESENT A PROPERTY LINE. SURVEY. PROPERTY LINES SHOWN HEREON ARE BASED ON RECORD DATA, AND MAY NOT REPRESENT THE TRUE POSITIONS OF THE LINES.
- THE TOPOGRAPHY IS BASED ON A FIELD SURVEY OF APRIL 16, 2019 PERFORMED BY ALBION SURVEYS, INC. UPDATED ON APRIL 22, 2019.
- SINCE COMPLETION OF THE FIELD SURVEY, CERTAIN STRUCTURES MAY HAVE BEEN DEMOLISHED AND/OR FIELD CONDITIONS HAVE BEEN ALTERED. AS SUCH, CONTRACTOR UNDERSTANDS, ACCEPTS, AND WILL ACCOMMODATE FOR CHANGED FIELD CONDITIONS WHICH ARE NOT SHOWN ON THESE PLANS DUE TO THE LACK OF AN UPDATED FIELD SURVEY. IF CONTRACTOR FINDS FIELD CONDITIONS HAVE BEEN ALTERED TO THE POINT WHERE ENGINEERING DESIGNS MUST BE ALTERED FOR CONSTRUCTION, CONTRACTOR SHALL STOP WORK AND NOTIFY THE PROJECT OWNER AND ENGINEERING TEAM FOR DIRECTION, ADDITIONAL SURVEYING, AND POSSIBLE REDESIGN.
- THE VERTICAL DATUM IS BASED ON NAVD 88 AND THE HORIZONTAL DATUM IS BASED ON NAD 83.
- SITE BENCHMARK SHALL BE DETERMINED BY CONTRACTOR IN THE FIELD.
- DELTA CONSULTING & ENGINEERING ASSUMES NO LIABILITY, REAL OR ALLEGED, REGARDING THE ACCURACY OF THE TOPOGRAPHIC INFORMATION SHOWN ON THESE PLANS.
- CONTRACTOR SHALL COORDINATE WITH PROJECT SURVEYOR PRIOR TO DEMOLITION OF ANY EXISTING SURVEY MONUMENTS. FAILURE TO DO SO, HE/SHE SHALL BE THE SOLE RESPONSIBLE FOR ANY EXPENSES TO REPLACE THE MONUMENTS OR RE-SURVEYED THE SITE.
- FADED BACKGROUND REPRESENTS EXISTING TOPOGRAPHIC FEATURES.

ESTIMATED EARTHWORK QUANTITIES

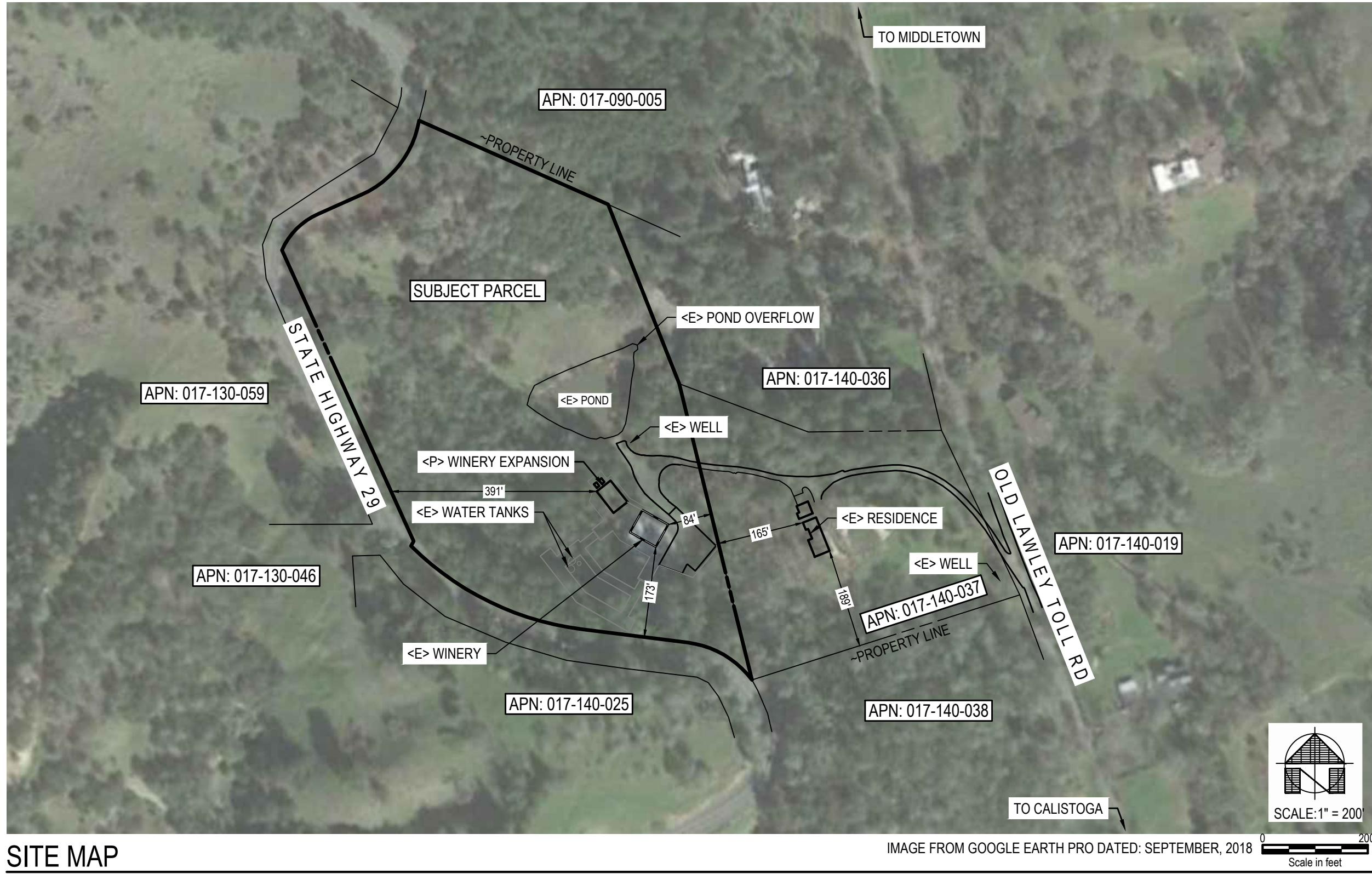
- THE EARTHWORK QUANTITIES LISTED BELOW ARE ESTIMATES ONLY AND MAY VARY DUE TO SOIL TYPE, COMPACTION/BULKING FACTORS, AND GRADING PRACTICES.
- THE CUT AND FILL QUANTITIES HAVE BEEN DERIVED USING A VOLUMETRIC ANALYSIS BY CIVIL 3D BETWEEN EXISTING SURFACE VERSUS PROPOSED FINISHED GRADE ELEVATIONS.
- THE FOLLOWING ASSUMPTIONS HAVE BEEN MADE WHEN COMPLETING THE ANALYSIS:
 - 1:1 COMPACTION AND BULKING FACTORS.
 - QUANTITIES HAVE NOT BEEN ADJUSTED FOR DRIVEWAYS, BUILDINGS, RETAINING WALLS, CONCRETE AREAS, PAVEMENT AREAS, STRUCTURE FOUNDATIONS, AND ANY OTHER SITE IMPROVEMENTS TO REFLECT THE EARTHWORK REQUIRED TO REACH SUB-GRADE. CONTRACTOR SHALL COORDINATE WITH ALL PROJECT CONSULTANTS PRIOR TO DETERMINE THE ACTUAL EARTHWORK QUANTITIES.
 - QUANTITIES FROM POOLS, SPAS, UTILITY TRENCHES, FOUNDATION TRENCHES, STORMWATER DETENTION BASINS, CAVES, SEPTIC TANKS, AND ANY UTILITY EXCAVATIONS HAVE NOT BEEN INCLUDED.
- CONTRACTOR SHALL WORK WITH THE PROJECT GEO-TECHNICAL ENGINEER TO DETERMINE COMPACTION AND BULKING FACTORS FOR THE PROPOSED GRADING ACTIVITIES. THESE FACTORS HAVE THE POTENTIAL TO SIGNIFICANTLY ALTER THE CUT & FILL QUANTITIES IDENTIFIED IN THIS ANALYSIS.
- SEE THE TABLE BELOW FOR THE ESTIMATED EARTHWORK QUANTITIES FOR THE PROJECT.

ESTIMATED PROJECT EARTHWORK		
	UNADJUSTED QUANTITIES (CY)	ADJUSTED QUANTITIES (CY)
CUT	3117	--
FILL	230	--
ESTIMATED TOTAL EARTHWORK		2886 EXPORT

APPROXIMATE CAVE SPOILS 7,666 CY. (CAVE SPOILS CALCULATED BASED ON CAVE AREA TIMES 14-24 FEET TUNNEL HEIGHT)

- SOILS IMPORTATION AND/OR OFF-HAULED. PROPER COUNTY BUILDING AND/OR GRADING PERMITS MUST BE IN PLACE FOR THE BORROW AND/OR EXPORT SITE. GENERAL AND/OR GRADING CONTRACTOR SHALL NOTIFY NAPA COUNTY ENGINEERING SERVICES (DANIEL HORNETT, DANIEL HORNETT@COUNTYNAPA.ORG, (707) 299-1358) REGARDING THE LOCATION OF THE BORROW SITE AND THE ASSOCIATED BUILDING AND/OR GRADING PERMIT INFORMATION. NO IMPORT OR EXPORT OF SOIL SHALL OCCUR ABSENT COUNTY NOTIFICATION AND APPROVAL, WRITTEN OR OTHERWISE.
- ALL IMPORTED SOILS SHALL BE INSPECTED BY THE PROJECT GEOTECHNICAL ENGINEER FOR SUITABILITY PRIOR TO IMPORTATION.
- THE APPROXIMATE AREA OF DISTURBED SOIL IS 51,365 SF (~1.2 AC).

USE PERMIT MODIFICATION PLANS FOR: AMICI CELLARS 3130 OLD LAWLEY TOLL ROAD CALISTOGA, CALIFORNIA, 94515

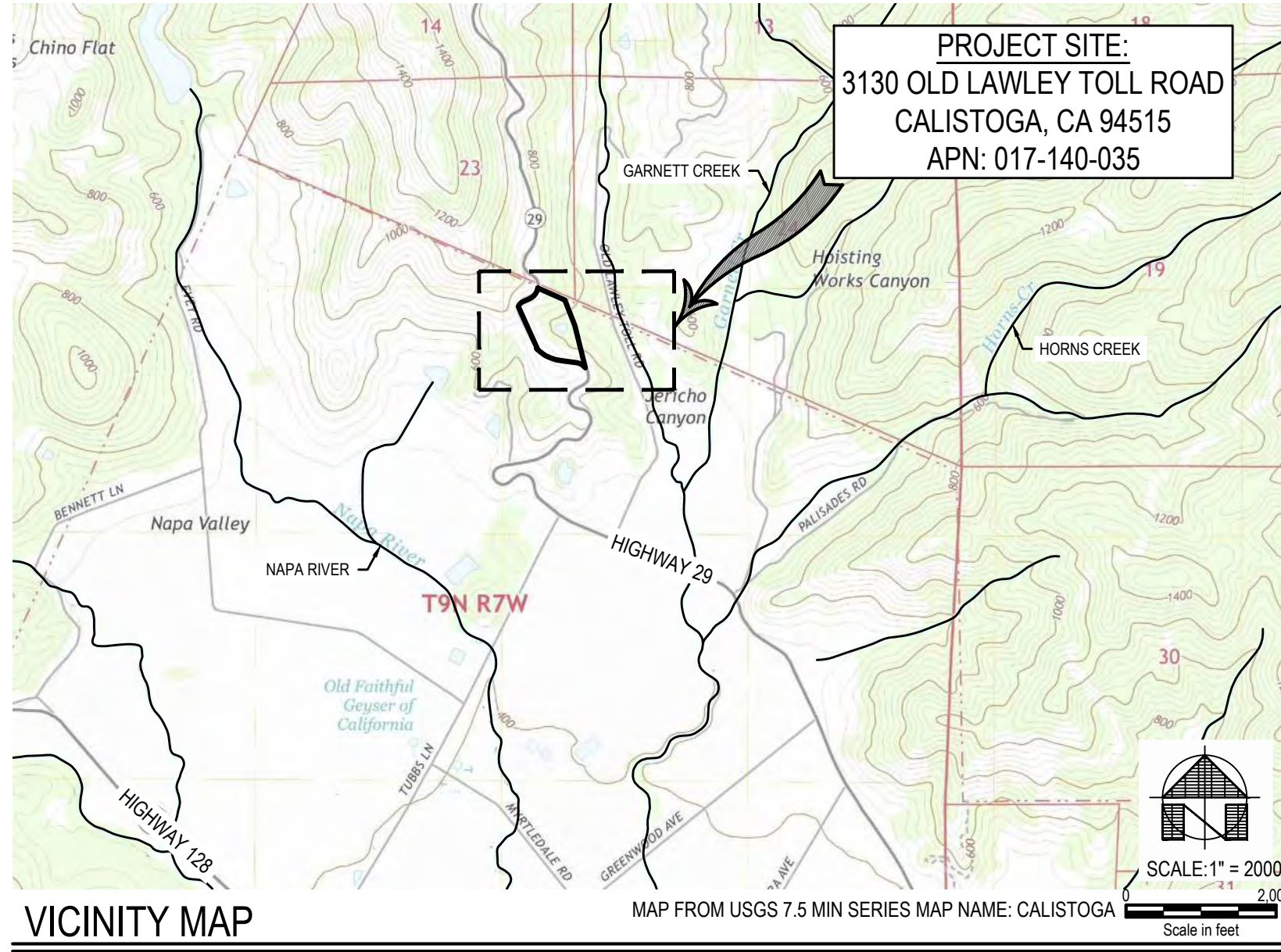


SITE MAP

IMAGE FROM GOOGLE EARTH PRO DATED: SEPTEMBER, 2018

PROJECT INFORMATION

OWNER:	PALSADES WINE COMPANY 3130 OLD LAWLEY TOLL ROAD CALISTOGA, CALIFORNIA 94515	ARCHITECT:	MH ARCHITECTS 2325 3RD ST. STUDIO 224 SAN FRANCISCO, CA 94107 MATT HOLLIS STEPHANIE STRAWHACKER 415977-0194
SITE ADDRESS:	3130 OLD LAWLEY TOLL ROAD CALISTOGA, CALIFORNIA 94515	PLANNING CONSULTANT:	DICKENSON FEATMAN & FOGARTY 1455 FIRST ST. SUITE 301 NAPA, CA 94559 JOSHUA S. DEVORE 707261-7000
ASSESSOR PARCEL #:	017-140-035	BIOLOGICAL CONSULTANT:	KJELSDEN BIOLOGICAL 923 ST. HELENA AVENUE SANTA ROSA, CA 95404 CHRIS K. KJELSDEN 707544-3091
PARCEL SIZE:	±12.05 ACRES		
COUNTY ZONING:	AW		
SURVEYOR:	ALBION SURVEYS, INC 1113 HUNT AVENUE ST. HELENA, CA 94574 JOE SULLIVAN, P.L.S. 707963-1217		
CIVIL ENGINEER:	DELTA CONSULTING & ENGINEERING, INC. 1104 ADAMS STREET, SUITE 203 ST. HELENA, CA 94574 ANDREW SIMPSON, P.E. DANE HONE, P.E. LUSVIN ARAUJO 707963-8456		



VICINITY MAP

MAP FROM USGS 7.5 MIN SERIES MAP NAME: CALISTOGA

USE PERMIT MODIFICATION COVER SHEET

AMICI CELLARS
3130 OLD LAWLEY TOLL ROAD
CALISTOGA, CA 94515
APN: 017-140-035
PROJECT: O-109



DATE: 09/15/19
05/29/20

ISSUE: SUBMITTAL
RE-SUBMITTAL

SHEET:

UP1.0

ABBREVIATIONS

AB	AGGREGATE BASE	FIRM	FLOOD INSURANCE RATE MAP	R	RADIUS
AC	ASPHALT CONCRETE	FL	FLOW LINE	RC	RELATIVE COMPACTION
AD	AREA DRAIN	FM	FORCE MAIN	RT	RIGHT
ARV	AIR RELEASE VALVE	FS	FINISH SURFACE	ROW	RIGHT OF WAY
BC	BEGIN CURVE	GB	GRADE BREAK	RWL	RAIN WATER LEADER
BFE	BASE FLOOD ELEVATION PER FRM	GL	GUTTER LINE	RCP	REINFORCED CONCRETE PIPE
BM	BENCHMARK	GR	GRAVEL	(S)	SOUTH
BO	BLOWOFF	HPB	HIGH DUTY PULL BOX	S	SLOPE (FEET/FOOT)
BOR	BEGIN CURB RETURN	HP	HIGH POINT	SAD	SEE ARCHITECTURAL DRAWINGS
BVC	BEGIN VERTICAL CURVE	IE	INVERT ELEVATION	SD	STORM DRAIN
BS	BOTTOM OF STAIRS	INST	INSTALL	SDP	SUBDRAIN PIPE
BSL	BUILDING SETBACK LINE	INV	INVERT	SED	SEE ELECTRICAL DRAWINGS
BSW	BACK OF SIDEWALK	IP	IRON PIPE	SLE	SEE LANDSCAPE DRAWINGS
CB	CATCH BASIN	IRR	IRRIGATION	SLV	SLEWIE
CKG	CURB AND GUTTER	JR	JOINT POLE	SMD	SEE MECHANICAL DRAWINGS
CMU	CONCRETE MASONRY UNIT	LF	LINEAL FEET/FOOT	SPD	SEE PLUMBING DRAWINGS
CP	CONCRETE PIPE	LH	LAMP HOLE	SS	SANITARY SEWER
CSB	CREEK SETBACK LINE	LPB	LIGHT DUTY PULL BOX	SSCO	SANITARY SEWER CLEAN OUT
CL	CENTERLINE	LP	LOW POINT	SSD	SEE STRUCTURAL DRAWINGS
COM	COMMUNICATION	POL	PROPOSED GAS LINE	SSPH	SANITARY SEWER FLUSH HOLE
COM	COMMUNICATION	MH	MANHOLE	SSMH	SANITARY SEWER MANHOLE
CV	CHECK VALVE	MON	MONUMENT	STA	STATION
CW	COLD WATER	MPB	MEDIUM DUTY PULL BOX	STD	STANDARD
DCV	DOUBLE CHECK VALVE	(N)	NORTH	SW	SIDEWALK
DG	DECOMPOSED GRANITE	NEW	NEW	TC	TOP OF CURB
DP	DUCTILE IRON PIPE	OC	ON CENTER	TD	TRENCH DRAIN
DS	DOWNSPOUT	OG	ORIGINAL GROUND	TFC	TOP FACE OF CURB
DW	DRAINWAY DOMESTIC WASTE	OH	OVERHEAD	TGB	TOP OF BANK
DWG	DRAWING	OHL	OVERHEAD LINE	TGC	TOP OF CONCRETE
EC	EDGE OF CURVE	<P>	PROPOSED	TS	TOP OF STAIRS
(E)	EAST	PCC	PORTLAND CONCRETE CEMENT	TW	TOP OF WALL
<E>	EXISTING	PD	PRESSURE DISTRIBUTION	TYP	TYPICAL
EC	EDGE OF CONCRETE	PGAE	PACIFIC GAS AND ELECTRIC	UG	UNDERGROUND
EGR	EDGE OF GRAVEL	PI	POINT OF INTERSECTION	VC	VERTICAL CURVE
EP	EDGE OF PAVEMENT	PV	POST INDICATOR VALVE	VS	VALLEY GUTTER
EVC	END VERTICAL CURVE	*L	PROPERTY LINE	(W)	WEST
EV	EXISTING GROUND	PRC	POINT OF REVERSE CURVE	WM	WATER METER
FG	FACE OF CURB	PSI	POUNDS PER SQUARE INCH	WSE	WATER SURFACE ELEVATION
FDC	FIRE DEPT. CONNECTION	PUE	PUBLIC UTILITY EASEMENT	WS	WATER SERVICE
FG	FINISH GRADE	PVC	POLYVINYL CHLORIDE	WV	WATER VALVE
FH	FIRE HYDRANT	PVI	POINT OF VERTICAL INTERSECTION		
		PW	PROCESS WASTE		

SYMBOL LEGEND

UTILITY POLE	SEWER MANHOLE/RISER WITH ID #
WELL TYPE MONUMENT	STORM DRAIN MANHOLE WITH ID #
SIGN	WATER VALVE
WELL	CHECK VALVE
STREET LIGHT	FDC/PI WITH CHECK VALVE
TREE	FIRE HYDRANT WITH GATE VALVE
TREE TO BE RELOCATED	CLEANOUT
TREE TO BE REMOVED	SANITARY SEWER CLEANOUT
SANITARY SEWER	PROPOSED CONTOUR
GAS LINE	SOLID STORM DRAIN
PROPANE GAS LINE	PERFORATED STORM DRAIN
WATER LINE	GRADE SWALE
EXISTING CONTOUR	OVERLAND RELEASE ROUTE
TOP OF BANK GRADEBREAK	
PROPERTY LINE	
CENTERLINE	

REVISIONS

- 05/29/2020
- UPDATED PROJECT PERMITS TABLE
- UPDATED EARTHWORK QUANTITIES TABLE
- UPDATED SURVEY NOTES
- UPDATED SHEET INDEX (REMOVED SHEET UP2.3)



UP1.3

APPENDIX B

Plant Species Observed

Botanical Name	Common Name	Native?
<i>Acer macrophyllum</i>	big leaf maple	Yes
<i>Acmispon americanus</i> var. <i>americanus</i>	Spanish lotus	Yes
<i>Adiantum jordanii</i>	California maidenhair fern	Yes
<i>Aesculus californica</i>	buckeye	Yes
<i>Aira caryophyllea</i>	silver hairgrass	-
<i>Arbutus menziesii</i>	madrone	Yes
<i>Avena fatua</i>	wild oats	-
<i>Baccharis pilularis</i>	coyote bush	Yes
<i>Brachypodium distachyon</i>	purple false brome	-
<i>Briza maxima</i>	rattlesnake grass	-
<i>Bromus catharticus</i>	rescue brome	-
<i>Bromus diandrus</i>	ripgut brome	-
<i>Bromus hordeaceus</i>	soft chess	-
<i>Bromus laevipes</i>	narrow flowered brome	Yes
<i>Bromus madritensis</i>	Mediterranean brom	-
<i>Carduus pycnocephalus</i>	Italian thistle	-
<i>Centaurea solstitialis</i>	yellow star thistle	-
<i>Centaureum erythraea</i>	European centaury	-
<i>Chichorium intybus</i>	chicory	-
<i>Chlorogalum pomeridianum</i> var. <i>pomeridianum</i>	common soaproot	Yes
<i>Croton setiger</i>	turkey-mullein	Yes
<i>Croton setigerus</i>	doveweed	Yes
<i>Cynosurus echinatus</i>	hedgehog dogtail grass	-
<i>Cyperus eragristus</i>	tall cyperus	Yes
<i>Daucus carota</i>	Queen Ann's lace	-
<i>Dichelostemma capitatum</i>	blue dicks	Yes
<i>Eleocharis macrostachya</i>	spike rush	Yes
<i>Elymus glaucus</i>	blue wild rye	Yes
<i>Eschscholzia californica</i>	California poppy	Yes
<i>Euphorbia peplus</i>	petty spurge	-
<i>Festuca bromioides</i>	brome fescue	-
<i>Festuca californica</i>	California fescue	Yes
<i>Festuca perennis</i>	Italian rye grass	-
<i>Galium aparine</i>	cleavers	-
<i>Genista monspessulana</i>	French broom	-
<i>Geranium dissectum</i>	cutleaf geranium	-
<i>Gnaphalium palustre</i>	lowland cudweed	Yes
<i>Heteromeles arbutifolia</i>	toyon	Yes
<i>Hirschfeldia incana</i>	perennial mustard	-
<i>Hordeum murinum</i>	foxtail barley	-
<i>Hypochaeris glabra</i>	cats ear	-
<i>Kickxia elatine</i>	sharp point fluellin	-

<i>Lactuca saligna</i>	willow leaf lettuce	-
<i>Leontodon saxatilis</i> ssp. <i>Longirostris</i>	hawkbit	-
<i>Lonicera hispidula</i>	honeysuckle	Yes
<i>Luzula parviflora</i>	small flowered wood rush	Yes
<i>Lysimachia arvensis</i>	scarlet pimpernel	-
<i>Lysimachia arvensis</i>	scarlet pimpernel	-
<i>Madia elegans</i>	madia	Yes
<i>Medicago polymorpha</i>	California burclover	-
<i>Melica imperfecta</i>	coast range melic	Yes
<i>Melica torreyana</i>	torrey melic	Yes
<i>Osmorhiza chilensis</i>	mountain sweet cicely	Yes
<i>Phalaris aquatica</i>	Harding grass	-
<i>Plantago lanceolata</i>	ribwort	-
<i>Polypogon monspelliensis</i>	rabbitsfoot grass	-
<i>Pseudotsuga menziesii</i>	Douglas fir	Yes
<i>Pteridium aquilinum</i>	western brackenfern	Yes
<i>Pteridium aquilinum</i> var. <i>pubescens</i>	Western bracken fern	Yes
<i>Quercus agrifolia</i>	coast live oak	Yes
<i>Quercus kelloggii</i>	black oak	Yes
<i>Quercus lobata</i>	valley oak	Yes
<i>Rubus armeniacus</i>	Himalayan blackberry	-
<i>Rumex crispus</i>	curly dock	-
<i>Salix exigua</i>	grey willow	Yes
<i>Salix lasiolepis</i>	arroyo willow	Yes
<i>Sambucus nigra</i> subsp. <i>Caerulea</i>	blue elderberry	Yes
<i>Sanicula crassicaulis</i>	Pacific sanicle	Yes
<i>Sisyrinchium bellum</i>	blue eyed grass	Yes
<i>Stachys rigida</i> var. <i>rigida</i>	hedge-nettle	Yes
<i>Stipa miliacea</i> var. <i>miliacea</i>	smilo grass	-
<i>Torilis arvensis</i>	field hedge parsley	-
<i>Toxicodendron diversilobum</i>	poison oak	Yes
<i>Trifolium hirtum</i>	rose clover	-
<i>Triteleia laxa</i>	Itherials spear	Yes
<i>Typha</i> sp.	cattail	Yes
<i>Umbellularia californica</i>	California bay	Yes
<i>Vicia villosa</i>	winter vetch	-
<i>Vinca major</i>	periwinkle	-
<i>Vitis californica</i>	California grape	Yes
<i>Wyethia angustifolia</i>	narrow leaf mule ears	Yes
<i>Wyethia glabra</i>	mule ears	Yes

APPENDIX C

Special Status Species Lists



Selected Elements by Scientific Name

California Department of Fish and Wildlife

California Natural Diversity Database



Query Criteria: BIOS selection

Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
<i>Accipiter striatus</i> sharp-shinned hawk	ABNKC12020	None	None	G5	S4	WL
<i>Amorpha californica</i> var. <i>napensis</i> Napa false indigo	PDFAB08012	None	None	G4T2	S2	1B.2
<i>Antrozous pallidus</i> pallid bat	AMACC10010	None	None	G5	S3	SSC
<i>Arctostaphylos manzanita</i> ssp. <i>elegans</i> Konocti manzanita	PDERI04271	None	None	G5T3	S3	1B.3
<i>Arctostaphylos stanfordiana</i> ssp. <i>decumbens</i> Rincon Ridge manzanita	PDERI041G4	None	None	G3T1	S1	1B.1
<i>Astragalus rattanii</i> var. <i>jepsonianus</i> Jepson's milk-vetch	PDFAB0F7E1	None	None	G4T3	S3	1B.2
<i>Bombus caliginosus</i> obscure bumble bee	IIHYM24380	None	None	G4?	S1S2	
<i>Bombus occidentalis</i> western bumble bee	IIHYM24250	None	Candidate Endangered	G2G3	S1	
<i>Brodiaea leptandra</i> narrow-anthered brodiaea	PMLIL0C022	None	None	G3?	S3?	1B.2
<i>Calystegia collina</i> ssp. <i>oxyphylla</i> Mt. Saint Helena morning-glory	PDCON04032	None	None	G4T3	S3	4.2
<i>Ceanothus confusus</i> Rincon Ridge ceanothus	PDRHA04220	None	None	G1	S1	1B.1
<i>Ceanothus divergens</i> Calistoga ceanothus	PDRHA04240	None	None	G2	S2	1B.2
<i>Ceanothus purpureus</i> holly-leaved ceanothus	PDRHA04160	None	None	G2	S2	1B.2
<i>Ceanothus sonomensis</i> Sonoma ceanothus	PDRHA04420	None	None	G2	S2	1B.2
<i>Centromadia parryi</i> ssp. <i>parryi</i> pappose tarplant	PDAST4R0P2	None	None	G3T2	S2	1B.2
<i>Coastal and Valley Freshwater Marsh</i> Coastal and Valley Freshwater Marsh	CTT52410CA	None	None	G3	S2.1	
<i>Corynorhinus townsendii</i> Townsend's big-eared bat	AMACC08010	None	None	G3G4	S2	SSC
<i>Cryptantha dissita</i> serpentine cryptantha	PDBOR0A0H2	None	None	G3	S3	1B.2
<i>Dicamptodon ensatus</i> California giant salamander	AAAAH01020	None	None	G3	S2S3	SSC
<i>Emys marmorata</i> western pond turtle	ARAAD02030	None	None	G3G4	S3	SSC



Selected Elements by Scientific Name
California Department of Fish and Wildlife
California Natural Diversity Database



Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
<i>Erigeron greenei</i> Greene's narrow-leaved daisy	PDAST3M5G0	None	None	G3	S3	1B.2
<i>Eryngium constancei</i> Loch Lomond button-celery	PDAP10Z0W0	Endangered	Endangered	G1	S1	1B.1
<i>Falco mexicanus</i> prairie falcon	ABNKD06090	None	None	G5	S4	WL
<i>Falco peregrinus anatum</i> American peregrine falcon	ABNKD06071	Delisted	Delisted	G4T4	S3S4	FP
<i>Hesperolinon bicarpellatum</i> two-carpellate western flax	PDLIN01020	None	None	G2	S2	1B.2
<i>Hesperolinon sharsmithiae</i> Sharsmith's western flax	PDLIN010E0	None	None	G2Q	S2	1B.2
<i>Juncus luciensis</i> Santa Lucia dwarf rush	PMJUN013J0	None	None	G3	S3	1B.2
<i>Lasthenia burkei</i> Burke's goldfields	PDAST5L010	Endangered	Endangered	G1	S1	1B.1
<i>Layia septentrionalis</i> Colusa layia	PDAST5N0F0	None	None	G2	S2	1B.2
<i>Leptosiphon jepsonii</i> Jepson's leptosiphon	PDPLM09140	None	None	G2G3	S2S3	1B.2
<i>Limnanthes floccosa ssp. floccosa</i> woolly meadowfoam	PDLIM02043	None	None	G4T4	S3	4.2
<i>Limnanthes vinculanus</i> Sebastopol meadowfoam	PDLIM02090	Endangered	Endangered	G1	S1	1B.1
<i>Lupinus sericatus</i> Cobb Mountain lupine	PDFAB2B3J0	None	None	G2?	S2?	1B.2
<i>Myotis yumanensis</i> Yuma myotis	AMACC01020	None	None	G5	S4	
<i>Navarretia leucocephala ssp. bakeri</i> Baker's navarretia	PDPLM0C0E1	None	None	G4T2	S2	1B.1
<i>Penstemon newberryi var. sonomensis</i> Sonoma beardtongue	PDSCR1L483	None	None	G4T3	S3	1B.3
<i>Plagiobothrys strictus</i> Calistoga popcornflower	PDBOR0V120	Endangered	Threatened	G1	S1	1B.1
<i>Poa napensis</i> Napa blue grass	PMPOA4Z1R0	Endangered	Endangered	G1	S1	1B.1
<i>Progne subis</i> purple martin	ABPAU01010	None	None	G5	S3	SSC
<i>Puccinellia simplex</i> California alkali grass	PMPOA53110	None	None	G3	S2	1B.2
<i>Rana boylei</i> foothill yellow-legged frog	AAABH01050	None	Endangered	G3	S3	SSC



Selected Elements by Scientific Name
California Department of Fish and Wildlife
California Natural Diversity Database



Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
<i>Rana draytonii</i> California red-legged frog	AAABH01022	Threatened	None	G2G3	S2S3	SSC
<i>Spergularia macrotheca</i> var. <i>longistyla</i> long-styled sand-spurrey	PDCAR0W062	None	None	G5T2	S2	1B.2
<i>Streptanthus brachiatus</i> ssp. <i>brachiatus</i> Socrates Mine jewelflower	PDBRA2G072	None	None	G2T1	S1	1B.2
<i>Streptanthus hesperidis</i> green jewelflower	PDBRA2G510	None	None	G2	S2	1B.2
<i>Streptanthus morrisonii</i> ssp. <i>elatus</i> Three Peaks jewelflower	PDBRA2G0S1	None	None	G2T1	S1	1B.2
<i>Stuckenia filiformis</i> ssp. <i>alpina</i> slender-leaved pondweed	PMPOT03091	None	None	G5T5	S2S3	2B.2
<i>Syncaris pacifica</i> California freshwater shrimp	ICMAL27010	Endangered	Endangered	G2	S2	
<i>Taricha rivularis</i> red-bellied newt	AAAAF02020	None	None	G4	S2	SSC
<i>Trachykele hartmani</i> serpentine cypress wood-boring beetle	IICOLX6010	None	None	G1	S1	
<i>Trichostema ruygtii</i> Napa bluecurls	PDLAM220H0	None	None	G1G2	S1S2	1B.2
<i>Trifolium hydrophilum</i> saline clover	PDFAB400R5	None	None	G2	S2	1B.2

Record Count: 52

APPENDIX D

Definitions for Special Status Species Designations

DEFINITIONS FOR SPECIAL STATUS SPECIES DESIGNATIONS

Federal Endangered Species Act

The following are the standard definitions for the status designations under the federal Endangered Species Act (ESA), implementing regulations and relevant notices (as published in the Federal Register). The ESA is administered by the U.S. Fish and Wildlife Service (USFWS).

Endangered – A species that is in danger of extinction throughout all or a significant portion of its range.

Threatened – A species that is likely to become an endangered species within the foreseeable future throughout all or a significant portion of its range.

Proposed for Listing – Taxa formally noticed as being under review to determine whether listing as threatened or endangered is warranted.

Candidate – Taxa for which USFWS has on file sufficient information on biological vulnerability and threat to support a proposed rule to list the species as endangered or threatened. Proposals to list have not yet been issued because this action is precluded by other listing activity. Species in this category are assigned a listing priority in order to assist the FWS in determining those species most in need of protection.

[Note: As of February 1996, the USFWS eliminated the differing categories of candidate species and now has only one category of candidate species as defined above.]

California Endangered Species Act

The following are the standard definitions for the status classifications under the California Endangered Species Act (CESA), administered by the California Department of Fish and Game (CDFG), now renamed the California Department of Fish and Wildlife (CDFW).

Endangered species – A native California bird, mammal, fish, amphibian, reptile or plant (species or subspecies) is endangered when it is in serious danger of becoming extinct throughout all, or a significant portion of, its range due to one or more causes, including loss of habitat, change of habitat, over-exploitation, predation, competition or disease (CDFW Code, Section 2062).

Threatened species – A native bird, mammal, fish, amphibian, reptile or plant (subspecies or species) is threatened when, although not presently threatened with extinction, it is likely to become an endangered species in the foreseeable future in the absence of special protection and management efforts. Any animal listed as "rare" by the Commission on or before January 1, 1985, is a threatened species (CDFW Code, Section 2067).

Candidate species – A native California species or subspecies of a bird, mammal, fish, amphibian, reptile, or plant is a candidate when the Fish and Wildlife Commission (Commission) has formally noticed it as being under review by the CDFW to determine whether listing as threatened or endangered is warranted, or when it is the subject of a proposed rulemaking by the Commission to list as threatened or endangered (CDFW Code, Section 2068).

California Department of Fish and Wildlife

Fully Protected – Fully Protected species may not be taken or possessed without a permit from the Fish and Wildlife Commission. Information of Fully Protected species can be found in the CDFW Code, (birds at §3511, mammals at §4700, reptiles and amphibians at §5050, and fish at §5515). Additional information on Fully Protected fish can be found in the California Code of Regulations, Title 14, Division 1, Subdivision 1, Chapter 2, Article 4, §5.93. The category of Protected Amphibians and reptiles in Title 14 has been repealed.

Species of Special Concern – A California species of special concern is a plant or animal species or subspecies that is possibly declining or is vulnerable to extirpation and may be considered for listing or for special management and protection measures. These species, although not legally protected under the CESA, are monitored by the CDFW.

It is the goal and responsibility of the CDFW to maintain viable populations of all native species. To this end, the CDFW has designated certain species as "Species of Special Concern" because declining population levels, limited ranges, and/or continuing threats have made them vulnerable to extinction. The goal of designating species as "Species of Special Concern" is to halt or reverse their decline by calling attention to their plight and addressing the issues of concern early enough to secure their long term viability. Not all "Species of Special Concern" have declined equally; some species may be just starting to decline, while others may have already reached the point where they meet the criteria for listing as a "Threatened" or "Endangered" species under the State and/ or Federal Endangered Species Acts.

California Native Plant Protection Act

The California Native Plant Protection Act (CNPPA), administered by the CDFW, protects "rare" plant species.

Rare – A native California plant (species, subspecies or variety) is rare when, although not presently threatened with extinction, it is in such small numbers throughout its range that it may become endangered if its present environment worsens (CDFW Code, Section 1901).

California Native Plant Society (CNPS) List of Rare, Threatened and Endangered Vascular Plants of California

The CNPS maintains a list of rare, threatened and endangered vascular plants of California which summarizes the distribution, rarity, endangerment, and ecology of these plants. CNPS updates this list approximately every four years. The most recent edition (8th ed.) was published in December 2010. The CNPS listing designations are as follows:

California Rare Plant Rank (CRPR) 1A – The plants Ranked as 1A are presumed extinct because they have not been seen or collected in the wild in California for many years. All of the List 1A plants meet the definitions of "rare", "endangered", or "threatened" contained in Fish and Game Code Section 1901 (Native Plant Protection Act), and Sections 2062 and 2067 (CESA).

CRPR 1B – The plants Ranked as 1B are rare throughout their range, and all but a few are endemic to California. List 1B plants are considered vulnerable under present circumstances or have a high potential for becoming so because of their limited or vulnerable habitat, low numbers of individuals per population, or their limited number of populations. As with List 1A plants, all of the 1B plants meet the definitions of "rare", "endangered", or "threatened" contained in Sections 1901, 2062 and 2067 of the Fish and Game Code.

CRPR 2 – Except for being common outside California, Rank 2 plants are defined similarly to List 1B plants.

CRPR 3 – Rank 3 contains plants about which more information is needed to assign them to one of the other lists or reject them. Some List 3 plants meet the definitions of "rare", "endangered", or "threatened" contained in Sections 1901, 2062 and 2067 of the Fish and Game Code.

CRPR 4 – The plants in Rank 4 are of limited distribution or infrequent throughout a broader area in California, and their susceptibility to threat appears low at this time. These plants are uncommon enough that their status should be monitored regularly. Very few List 4 plants meet the definitions of "rare", "endangered", or "threatened" contained in Sections 1901, 2062 and 2067 of the Fish and Game Code, and few, if any, are eligible for state listing.

CNPS Threat Code extensions and their meanings:

- .1 – Seriously endangered in California
- .2 – Fairly endangered in California
- .3 – Not very endangered in California

CNPS Local Listings (Alameda and Contra Costa Counties)

***A1** or ***A2** – Species in Alameda and Contra Costa Counties listed as rare, threatened or endangered statewide by federal or state agencies or by the state level of CNPS.

A1x – Species previously known from Alameda or Contra Costa Counties, but now presumed extirpated here.

A1 – Species currently known from two or less regions in Alameda and Contra Costa Counties.

A2 – Species currently known from three to five regions in the two counties, or, if more, meeting other important criteria such as small populations, stressed or declining populations, small geographical range, limited or threatened habitat, etc.

A1? – Species with taxonomic or distribution problems that make it unclear if they actually occur here.

Special Animals

California Department of Fish and Wildlife (CDFW)

Special Animals – Special animals is a general term that refers to all of the taxa that the California Natural Diversity Database (CNDDDB) is interested in tracking, regardless of their legal or protection status. This list is also referred to as the list of “species at risk” or “special status species”. The CDFW considers the taxa on this list to be those of greatest conservation need and were used in the development of California’s Wildlife Action Plan (CDFG 2009). Special animals includes a broad list of agency designations.

For more information see: <http://www.dfg.ca.gov/biogeodata/cndddb/pdfs/SPAnimals.pdf>

Watch List – The Watch List consists of taxa that were previously Species of Special Concern (SSC’s) but no longer merit SSC status or which do not meet SSC criteria but for which there is concern and a need for additional information to clarify status.

Other “Special Animal” Status Codes:

The status of species on the Special Animals List according to other conservation organizations is provided. Taxa on these lists are reviewed for inclusion in the CNDDDB Special Animals List, but are not automatically included. For example, taxa that are regionally rare within a portion of California may not be included, because they may be of lesser conservation concern across their full range in California.

These species, which are also tracked regardless of their legal or protection status, are provided below.

U.S Fish and Wildlife Service (USFWS)

Birds of Conservation Concern – The goal of the Birds of Conservation Concern report is to accurately identify the migratory and non-migratory bird species (beyond those already designated as federally threatened or endangered) that represent the US Fish and Wildlife Service’s highest conservation priorities and draw attention to species in need of conservation action.

National Marine Fisheries Service (NMFS) also known as NOAA Fisheries

Species of Concern – NOAA Fisheries is responsible for the management, conservation, and protection of living marine resources within the United States Exclusive Economic Zone. Species of Concern are those species about which we have some concerns regarding status and threats, but for which insufficient information is available to indicate a need to list the species under the Endangered Species Act (ESA). Though NMFS wishes to draw proactive attention and conservation action to these species, "Species of concern" status does not carry any procedural or substantive protections under the ESA.

Bureau of Land Management

Sensitive – According to BLM Manual 6840, a Bureau Sensitive Species must meet the following criteria to be considered for sensitive species listing:

- They must be native species found on BLM-administrated lands for which BLM has the capability to significantly affect the conservation status of the species through management.
- Information is available that a species has recently undergone, is undergoing, or is predicted to undergo a downward trend such that the viability of the species or a distinct population segment of the species is at risk across all or a significant portion of the species range.

- The species depends on ecological refugia or specialized or unique habitats on BLM-administrated lands, and there is evidence that such areas are threatened with alteration such that the continued viability of the species in that area would be at risk.
- All federally designated candidate species, proposed species, and delisted species in the 5 years following their delisting shall be conserved as Bureau Sensitive Species.

Once a species is declared sensitive by the BLM, it is their obligation to determine its distribution and manage the species' habitat.

California Dept. of Forestry & Fire Protection

CDF Sensitive – California Department of Forestry and Fire Protection classifies “sensitive species” as those species that warrant special protection during timber operations. The list of “sensitive species” is given in §895.1 (Definitions) of the California Forest Practice Rules.

International Union for Conservation of Nature (IUCN)

IUCN List – The IUCN assesses, on a global scale, the conservation status of species, subspecies, varieties and even selected subpopulations in order to highlight taxa threatened with extinction, and therefore promote their conservation. Detailed information on the IUCN and the Red List is available at: <http://www.iucnredlist.org>

Marine Mammal Commission

Species of Special Concern – Section 202 of the Marine Mammal Protection Act directs the Marine Mammal Commission, in consultation with its Committee of Scientific Advisors, to make recommendations to the Department of Commerce, the Department of the Interior, and other federal agencies on research and management actions needed to conserve species of marine mammals. To meet this charge, the Commission devotes special attention to particular species and populations that are vulnerable to various types of human-related activities, impacts, and contaminants. Such species may include marine mammals listed as Endangered or Threatened under the Endangered Species Act or as depleted under the Marine Mammal Protection Act. In addition, the Commission often directs special attention to other species or populations of marine mammals not so listed whenever special conservation challenges arise that may affect them.

More information on the Marine Mammal Protection Act and the Marine Mammal Species of Special Concern list is available at: <http://www.mmc.gov/species/welcome.shtml>

U.S Forest Service

Sensitive – USDA Forest Service defines sensitive species as plant and animal species identified by a regional forester that are not listed or proposed for listing under the Federal Endangered Species Act for which population viability is a concern, as evidenced by significant current or predicted downward trends in population numbers or density, or significant current or predicted downward trends in habitat capability that would reduce a species' existing distribution. Regional Foresters identify sensitive species occurring within each region. California is the Pacific Southwest Region (Region 5).

More information is available at: <http://www.fs.usda.gov/main/r5/plants-animals> and at: http://www.fs.usda.gov/Internet/FSE_DOCUMENTS/stelprdb5435266.xlsx

North American Bird Conservation Initiative (NABCI)

North American Bird Conservation Initiative Watchlist – The North American Bird Conservation Initiative is a coalition of private organization and government agencies. They work to ensure the long-term health of North America's native bird populations and publish an annual State of the Birds report. The annual State of the Bird report includes a watch list of bird species in need of conservation help and classifies the birds as either Red Watch List or Yellow Watch List species. Species on the Red Watch List have extremely high vulnerability, and Yellow Watch List species are species that may be range restricted or may be widespread but with declines and high threats. More information is available at <http://stateofthebirds.org>.

American Fisheries Society (AFS)

AFS List – Designations for freshwater and diadromous species were taken from the paper: Jelks, L., S.J. Walsh, N.M. Burkhead, S. Contreras-Balderas, E. Díaz-Pardo, D.A. Hendrickson, J. Lyons, N.E. Mandrak, F. McCormick, J.S. Nelson, S.P. Platania, B.A. Porter, C.B. Renaud, J. J. Schmitter-Soto, E.B. Taylor, and M.L. Warren, Jr. 2008. Conservation status of imperiled North American freshwater and diadromous fishes. *Fisheries* 33(8):372-407. Available at:

http://www.fisheries.org/afs/docs/fisheries/fisheries_3308.pdf

Designations for marine and estuarine species were taken from the paper: Musick, J.T. et al. 2000. "Marine, Estuarine, and Diadromous Fish Stocks at Risk of Extinction in North America (Exclusive of Pacific Salmonids). *Fisheries* 25(11):6-30. Available at:

<http://www.flmnh.ufl.edu/fish/sharks/sawfish/Reprint1390.pdf>

Western Bat Working Group (WBWG)

WBWG List – The WBWG is comprised of agencies, organizations and individuals interested in bat research, management and conservation from the 13 western states and provinces. The goals are (1) to facilitate communication among interested parties and reduce risks of species decline or extinction; (2) to provide a mechanism by which current information on bat ecology, distribution and research techniques can be readily accessed; and (3) to develop a forum to discuss conservation strategies, provide technical assistance and encourage education programs. Species are ranked as High, Medium, or Low Priority in each of 10 regions in western North America. Because California includes multiple regions where a species may have different WBWG Priority ranks, the CNNDDB includes categories for Medium-High, and Low-Medium Priority. The CNDDDB tracks bat species that are at least Low-Medium Priority in California. More information is available at: <http://www.wbwg.org>

The Xerces Society

Red List – The Xerces Society is an international non-profit organization dedicated to protecting biological diversity through invertebrate conservation. The Society advocates for invertebrates and their habitats by working with scientists, land managers, educators, and citizens on conservation and education projects. Their core programs focus on endangered species, native pollinators, and watershed health. More information on the Red List is available at:
<http://www.xerces.org>

Special Status Species Abbreviations

Federal Endangered Species Act

FE	Federally-listed as endangered
FT	Federally-listed as threatened
FPE	Federally proposed for listing as endangered or threatened
FC	Federal candidate for listing as endangered or threatened

State Endangered Species Act

SE	State-listed as endangered
ST	State-listed as threatened
SC	State candidate for listing as endangered or threatened

California Department of Fish and Wildlife

FP	Fully protected
SSC	California species of special concern
WL	Watch List

California Native Plant Protection Act

CNPPA: Rare	Rare plant
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California Native Plant Society

CRPR	California Rare Plant Rank
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SPECIAL ANIMALS (SA)

California Department of Fish and Wildlife

CDFW: WL Watch list

CDFW: SA Special Animal

US Fish and Wildlife Service

USFWS:BCC Birds of Conservation Concern

NMFS (NOAA Fisheries)

NMFS: SC Species of Concern

Bureau of Land Management

BLM:S Sensitive

California Dept. of Forestry & Fire Protection

CDFS:S Sensitive

International Union for Conservation of Nature

IUCN:CD Conservation Dependent

IUCN:CR Critically Endangered

IUCN:DD Data Deficient

IUCN:EN Endangered

IUCN:EW Extinct in the Wild

IUCN:EX Extinct

IUCN:LC Least Concern

IUCN:NE Not evaluated

IUCN:NT Near Threatened

IUCN:VU Vulnerable

Marine Mammal Commission

MMC:SSC Species of Special Concern

National Marine Fisheries Service

NMFS:SC Species of Special Concern

U.S Forest Service

USFS:S Sensitive

Western Bat Working Group

WBWG: H High priority

WBWG: LM low-medium priority

WBWG: M medium priority

WBWG: MH medium-high priority

Xerces Society Red List

X: CI Critically imperiled

X: DD Data deficient

X: IM Imperiled

X: VU Vulnerable

North American Bird Conservation Initiative

NABCI: RWL Red watch list

NABCI: YWL Yellow watch list

American Fisheries Society

AMS: EN Endangered

AMS: TH Threatened

AMS: VU Vulnerable