

Appendix B: Biological Report



H. T. HARVEY & ASSOCIATES

Ecological Consultants



Mountain Winery Annexation Biological Resources Report

Project #2301-04



Prepared for:

Danae Hall
Kimley-Horn

100 West San Fernando Street, Suite #250
San Jose, CA 95113



Prepared by:

H. T. Harvey & Associates



September 30, 2019

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List of Preparers

Steve Rottenborn, Ph.D., Principal/Senior Wildlife Ecologist
Kelly Hardwicke, Ph.D., Senior Plant/Wetland Ecologist
Ginger Bolen, Ph.D., Project Manager/Senior Wildlife Ecologist
Mark Bibbo, M.S., Senior Plant Ecologist
Craig R. Fosdick, M.S., Wildlife Ecologist
Jill Pastick, B.S., Plant Ecologist

Section 1. Introduction

This report describes the biological resources present in the area of the proposed Urban Services Area and Sphere of Influence boundaries amendment and subsequent annexation of the Mountain Winery property (hereafter, the *Project*), as well as the potential biological impacts of the Project and measures necessary to reduce these impacts to less-than-significant levels under the California Environmental Quality Act (CEQA). This assessment is based on the Project description provided to H. T. Harvey & Associates by Kimley-Horn in July 2019.

1.1 Project Description and Location

The City of Saratoga intends to prepare an Environmental Impact Report (EIR) for the Mountain Winery Annexation Project. The Project would consist of adjustments to the City of Saratoga's Urban Service Area and Sphere of Influence boundaries to include APNs 503-46-006 and 503-46-007. The Project also includes related General Plan and zoning ordinance amendments, adoption of a Precise Plan and development agreement, and subsequent annexation of the parcels into the City. In addition, the Project entails annexation into the Cupertino Sanitary District to allow for the potential to connect to the Cupertino Sanitary District system in the future. Figure 1 indicates the general location of the Project.

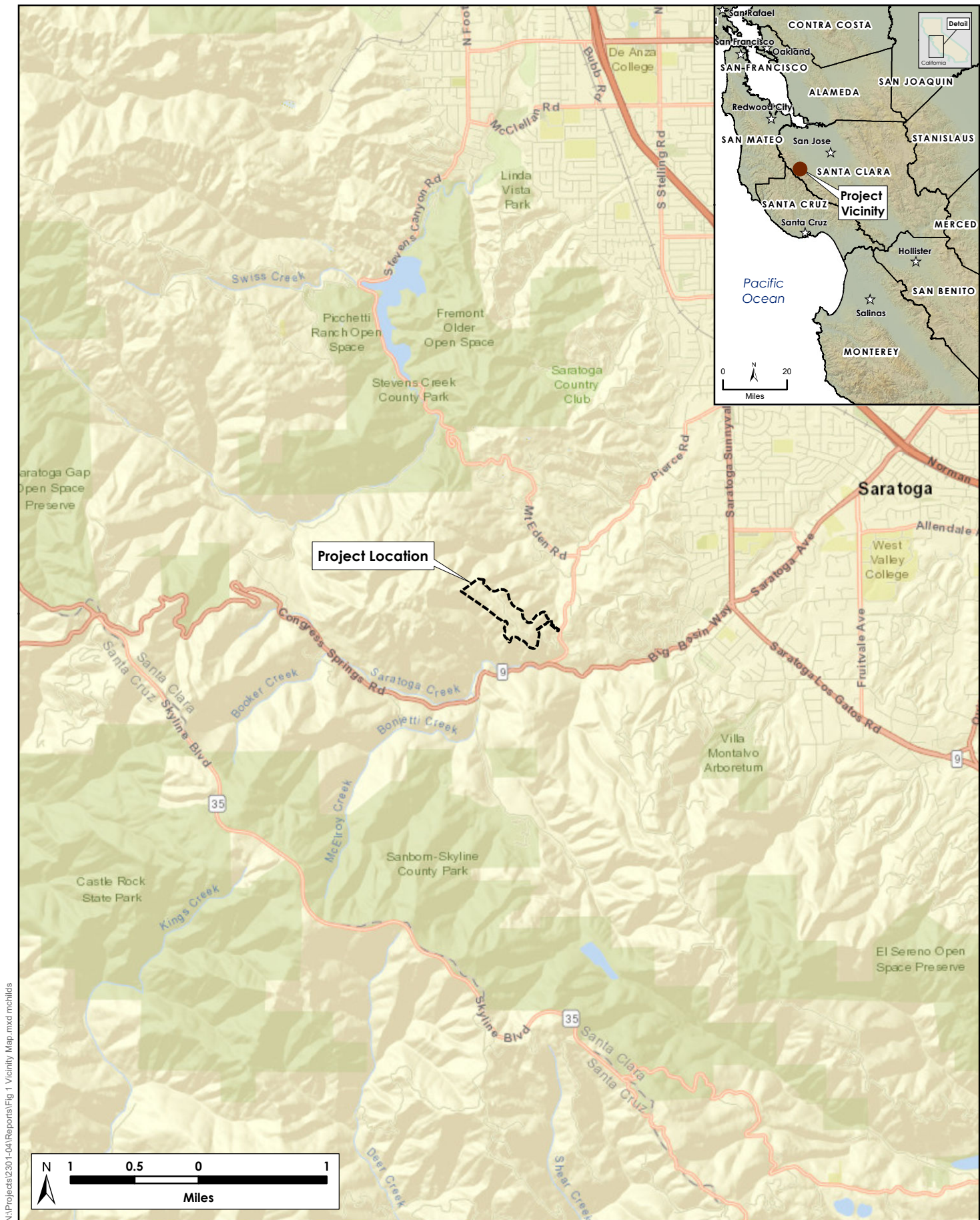
A new General Plan land use designation of Regional Commercial (RC) and a new zoning district of Regional Commercial (RC) would be applied to APN 503-46-006 and a portion of APN 503-46-007. The City would prepare a Precise Plan to establish more specific land use regulations and design standards for the new RC land use designation and zoning district. The Precise Plan boundaries would encompass an area of previously disturbed land where the existing Mountain Winery operations occur. An existing General Plan land use designation of Hillside Open Space (OS-H) and an existing zoning district of Residential Open Space (R-OS) would be applied to the remainder of APN 503-46-007, outside the Precise Plan boundaries.

The new General Plan land use designation (RC) and the new zoning district (RC) and Precise Plan would allow uses permitted under the Mountain Winery's existing County Use Permit (approved in 2000, modified in 2018) to continue, while also allowing for new uses (subject to a maximum permissible density and intensity of use established by the Precise Plan). Uses currently permitted under the County Use Permit include the existing Mountain Winery operations, a future wine tasting building, a future concession building, a future event building, a future storage building, a future ticket office, and a future outdoor terrace garden area. New uses allowed by the Project would include lodging uses (up to 300 rooms), a second water tank, and future connections to the Cupertino Sanitary District infrastructure to support the new uses. The new lodging uses and water tank would be allowed within the Precise Plan boundaries. The infrastructure for the potential future connection to the Cupertino Sanitary District would be located on a portion of the APN 503-46-005 parcel, at the eastern end of the study area. The APN 503-46-005 parcel would retain the existing land use designation of OS-H and zoning district of R-OS. The OS-H land use designation and R-OS zoning district on the portion

APN 503-46-007 not in the RC designation are intended to support and enhance a rural character, promote the wise use of natural resources, and avoid natural hazards; environmentally sensitive low density residential use (up to one residential dwelling unit per 160 acres based on the slope at this site) is allowed under this land use designation and zoning district.

Annexation in and of itself would not involve any impacts to biological resources, and continuation of existing, ongoing activities at Mountain Winery would not have any impacts relative to baseline conditions. However, the Project would also allow for new and/or modified uses, including lodging, which would have on-the-ground impacts. The purpose of this report is to describe the biological resources present within the Project study area, as well as the potential impacts of the proposed Project on biological resources. Where necessary, this report also describes measures necessary to reduce impacts to less-than-significant levels under CEQA.

The “biological study area” for this Biological Resources Report includes areas where lodging and other future activities may occur and is composed of the Precise Plan boundary and the Sanitary Sewer Connection boundary (Figure 2). The study area is confined to the ridgetop plateau and lies entirely within the existing property fence. The potential future connection to the Cupertino Sanitary District would be located in the eastern end of the study area. The study area is bordered on the north and west by private property, low-density residential housing and privately-owned wineries, to the east by residential development and the City of Saratoga, and to the south by the Saratoga Creek drainage.



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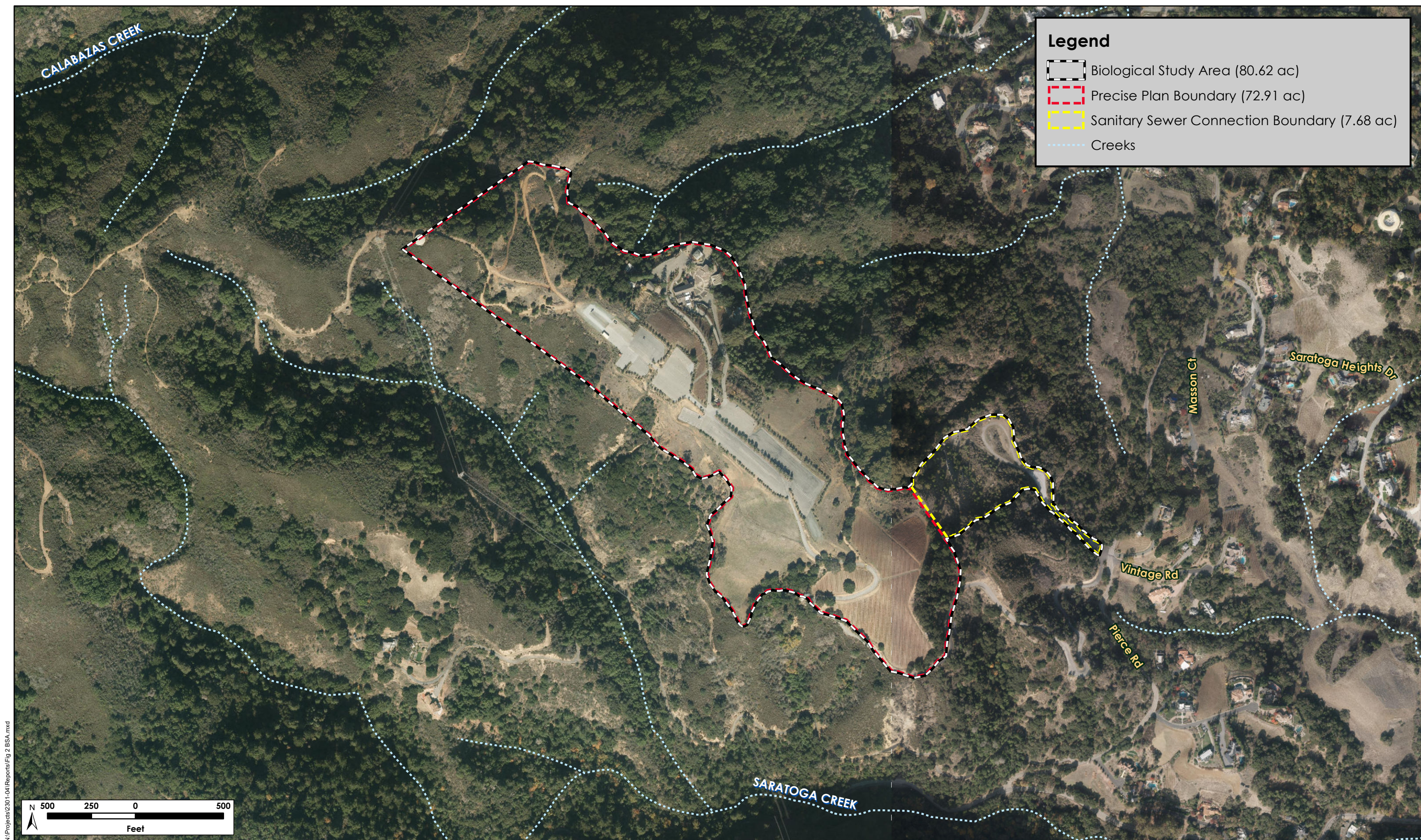
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Figure 1. Vicinity Map

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September 2019



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Figure 2. Biological Study Area

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Section 2. Methods

2.1 Background Review

Prior to conducting field work, H. T. Harvey & Associates ecologists reviewed aerial images (Google Inc. 2019) of the study area; a U.S. Geological Survey (USGS) topographic map; the California Department of Fish and Wildlife's (CDFW's) California Natural Diversity Database (CNDDB 2019); and other relevant scientific literature and technical databases. Previous reports prepared for the Project vicinity were also reviewed, including the Final Environmental Impact Reports (EIRs) for the Mountain Winery (County of Santa Clara 2000), and the Saratoga Quarry Park Initial Study/Mitigated Negative Declaration (City of Saratoga 2014).

In addition, for plants, H. T. Harvey & Associates plant ecologists reviewed all species on current California Native Plant Society (CNPS) California Rare Plant Rank (CRPR) 1A, 1B, 2A, and 2B lists occurring in the *Cupertino, California* 7.5-minute USGS quadrangle and surrounding eight quadrangles (*San Jose West, Los Gatos, Castle Rock Ridge, Big Basin, Mindero Hill, Palo Alto, Mountain View, and Milpitas, California*). Quadrangle-level results are not maintained for CRPR 3 and 4 species, so we also conducted a search of the CNPS Inventory records for these species occurring in Santa Clara County (CNPS 2019). In addition, we queried the CNDDB (2019) for natural communities of special concern that occur in the Project region. For the purposes of this report, the "Project vicinity" encompasses a 5-mile radius surrounding the study area.

2.2 Site Visits

Reconnaissance-level field surveys of the study area were conducted by H. T. Harvey & Associates wildlife ecologist Craig Fosdick, M.S., and plant ecologist Jill Pastick, M.S., on June 28 and July 26, 2019. The purpose of these surveys was to provide a Project-specific impact assessment for the potential future activities related to development of the Project study area. Specifically, surveys were conducted to (1) assess existing biotic habitats and general plant and wildlife communities in the study area, (2) assess the potential for the Project to impact special-status species and/or their habitats, and (3) identify potential jurisdictional habitats, such as waters of the U.S./State and riparian habitat.

Section 3. Regulatory Setting

Biological resources in the study area are regulated by a number of federal, state, and local laws and ordinances, as described below.

3.1 Federal

3.1.1 Clean Water Act

The Clean Water Act (CWA) functions to maintain and restore the physical, chemical, and biological integrity of waters of the U.S., which include, but are not limited to, tributaries to traditionally navigable waters currently or historically used for interstate or foreign commerce, and adjacent wetlands. Historically, in non-tidal waters, U.S. Army Corps of Engineers (USACE) jurisdiction extends to the ordinary high water (OHW) mark, which is defined in Title 33, Code of Federal Regulations (CFR), Part 328.3. If there are wetlands adjacent to channelized features, the limits of USACE jurisdiction extend beyond the OHW mark to the outer edges of the wetlands. Wetlands that are not adjacent to waters of the U.S. are termed “isolated wetlands” and, depending on the circumstances, may be subject to USACE jurisdiction. In tidal waters, USACE jurisdiction extends to the landward extent of vegetation associated with salt or brackish water or the high tide line. The high tide line is defined in 33 CFR Part 328.3 as “the line of intersection of the land with the water’s surface at the maximum height reached by a rising tide.” If there are wetlands adjacent to channelized features, the limits of USACE jurisdiction extend beyond the OHW mark or high tide line to the outer edges of the wetlands.

Construction activities within jurisdictional waters are regulated by the USACE. The placement of fill into such waters must comply with permit requirements of the USACE. No USACE permit will be effective in the absence of Section 401 Water Quality Certification. The State Water Resources Control Board (SWRCB) is the state agency (together with the Regional Water Quality Control Boards [RWQCBs]) charged with implementing water quality certification in California.

Project Applicability: The only feature observed within the study area that could be considered wetlands and/or waters of the U.S. was a roadside ditch present along the base of the abandoned gravel quarry in the southeast portion of the Project study area. This feature supports wetland vegetation in patches. This feature or the patches of wetlands within it could potentially be impacted by a potential Project sewer tie-in, in which case a Section 404 permit from the USACE would be required if the USACE claims it as waters of the U.S. (see Section 5.3). Otherwise, no potential wetlands or other waters of the U.S. were observed within the Project study area. Intermittent and ephemeral drainages that would be considered waters of the U.S. occur just outside of the study area on the hillsides downslope of the property boundary. If Project-related construction activities expanded to areas outside of the study area, resulting in impacts to these drainages, then a permit from the USACE would be required.

3.1.2 Federal Endangered Species Act

The U.S. Fish and Wildlife Service (USFWS) and the National Marine Fisheries Service (NMFS) have jurisdiction over federally listed, threatened, and endangered species under FESA. The USFWS also maintains lists of proposed and candidate species. Species on these lists are not legally protected under FESA, but may become listed in the near future and are often included in their review of a Project.

Project Applicability: Suitable habitat for federally listed plant species does not occur in the study area. One federally listed animal species, the federally threatened California red-legged frog (*Rana draytonii*), may occur in the study area. Incidental take approval from the USFWS would be needed if take of this species were to occur. No critical habitat for any federal species occurs in the study area (USFWS 2019).

3.1.3 Magnuson-Stevens Fishery Conservation and Management Act

The Magnuson-Stevens Fishery Conservation and Management Act governs all fishery management activities that occur in federal waters within the United States' 200-nautical-mile limit. The Act establishes eight Regional Fishery Management Councils responsible for the preparation of fishery management plans (FMPs) to achieve the optimum yield from U.S. fisheries in their regions. These councils, with assistance from NMFS, establish Essential Fish Habitat (EFH) in FMPs for all managed species. Federal agencies that fund, permit, or implement activities that may adversely affect EFH are required to consult with NMFS regarding potential adverse effects of their actions on EFH, and respond in writing to recommendations by NMFS.

Project Applicability: No suitable aquatic habitat is present in the study area to provide EFH for fish species that are subject to FMPs.

3.1.4 Federal Migratory Bird Treaty Act

The federal Migratory Bird Treaty Act (MBTA), 16 U.S.C. Section 703, prohibits killing, possessing, or trading of migratory birds except in accordance with regulations prescribed by the Secretary of the Interior. The MBTA protects whole birds, parts of birds, and bird eggs and nests, and prohibits the possession of all nests of protected bird species whether they are active or inactive. An active nest is defined as having eggs or young, as described by the Department of the Interior in its April 16, 2003 Migratory Bird Permit Memorandum. Nest starts (nests that are under construction and do not yet contain eggs) are not protected from destruction.

Project Applicability: All native bird species that occur in the study area are protected under the MBTA.

3.2 State

3.2.1 Clean Water Act Section 401/Porter-Cologne Water Quality Control Act

The SWRCB works in coordination with the nine RWQCBs to preserve, protect, enhance, and restore water quality. Each RWQCB makes decisions related to water quality for its region, and may approve, with or without

conditions, or deny Projects that could affect waters of the State. Their authority comes from the CWA and the State's Porter-Cologne Water Quality Control Act (Porter-Cologne). Porter-Cologne broadly defines waters of the State as "any surface water or groundwater, including saline waters, within the boundaries of the state." Because Porter-Cologne applies to any water, whereas the CWA applies only to certain waters, California's jurisdictional reach overlaps and may exceed the boundaries of waters of the U.S. For example, Water Quality Order No. 2004-0004-DWQ states that "shallow" waters of the State include headwaters, wetlands, and riparian areas. Moreover, the San Francisco Bay Region RWQCB's Assistant Executive Director, has stated that, in practice, the RWQCBs claim jurisdiction over riparian areas. Where riparian habitat is not present, such as may be the case at headwaters, jurisdiction is taken to the top of bank.

On April 2, 2019, the SWRCB adopted the State Wetland Definition and Procedures for Discharges of Dredged or Fill Material to Waters of the State. In these new guidelines, riparian habitats are not specifically described as waters of the state but instead as important buffer habitats to streams that do conform to the State Wetland Definition. The Procedures describe riparian habitat buffers as important resources that may both be included in required mitigation packages for permits for impacts to waters of the state, as well as areas requiring permit authorization from the RWQCBs to impact.

Pursuant to the CWA, Projects that are regulated by the USACE must also obtain a Section 401 Water Quality Certification permit from the RWQCB. This certification ensures that the proposed Project will uphold state water quality standards. Because California's jurisdiction to regulate its water resources is much broader than that of the federal government, proposed impacts on waters of the State require Water Quality Certification even if the area occurs outside of USACE jurisdiction. Moreover, the RWQCB may impose mitigation requirements even if the USACE does not. Under the Porter-Cologne, the SWRCB and the nine regional boards also have the responsibility of granting CWA National Pollutant Discharge Elimination System (NPDES) permits and Waste Discharge Requirements for certain point-source and non-point discharges to waters. These regulations limit impacts on aquatic and riparian habitats from a variety of urban sources.

Project Applicability: As mentioned in Section 3.1.1, a roadside ditch along the base of the abandoned gravel quarry in the southeast portion of the Project study area supports wetland vegetation in patches and could potentially be claimed as waters of the State by the RWQCB. If this feature is impacted by the sewer tie-in, a Section 401 Water Quality Certification (or Waste Discharge Requirements under Porter-Cologne, in the event that the USACE did not claim this feature as jurisdictional waters of the U.S. but the RWQCB claimed it as waters of the State) would be required. Otherwise, no potential wetlands or other waters of the State were observed within the Project study area. Numerous drainages just outside of and downslope of the study area would be claimed as waters of the State by the RWQCB. Such areas would fall under jurisdiction of the San Francisco RWQCB, and a Section 401 Water Quality Certification would be required if any Project activities within the study area would cause any indirect impacts on these waters from construction-related erosion or changes to stormwater runoff.

3.2.2 California Endangered Species Act

The California Endangered Species Act (CESA; California Fish and Game Code, Chapter 1.5, Sections 2050-2116) prohibits the take of any plant or animal listed or proposed for listing as rare (plants only), threatened, or endangered. In accordance with CESA, the CDFW has jurisdiction over state-listed species (Fish and Game Code 2070). The CDFW regulates activities that may result in “take” of individuals (i.e., “hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill”). Habitat degradation or modification is not expressly included in the definition of “take” under the California Fish and Game Code. The CDFW, however, has interpreted “take” to include the “killing of a member of a species which is the proximate result of habitat modification.”

Project Applicability: No suitable habitat for any state-listed plant or animal species occurs in the study area. Thus, no state listed species are expected to be impacted by the Project.

3.2.3 California Environmental Quality Act

CEQA is a state law that requires state and local agencies to document and consider the environmental implications of their actions and to refrain from approving Projects with significant environmental effects if there are feasible alternatives or mitigation measures that can substantially lessen or avoid those effects. CEQA requires the full disclosure of the environmental effects of agency actions, such as approval of a general plan update or the Projects covered by that plan, on resources such as air quality, water quality, cultural resources, and biological resources. The State Resources Agency promulgated guidelines for implementing CEQA are known as the State CEQA Guidelines.

Section 15380(b) of the State CEQA Guidelines provides that a species not listed on the federal or state lists of protected species may be considered rare if the species can be shown to meet certain specified criteria. These criteria have been modeled after the definitions in FESA and CESA and the section of the California Fish and Game Code dealing with rare or endangered plants and animals. This section was included in the guidelines primarily to deal with situations in which a public agency is reviewing a Project that may have a significant effect on a species that has not yet been listed by either the USFWS or CDFW or species that are locally or regionally rare.

The CDFW has produced three lists (amphibians and reptiles, birds, and mammals) of “species of special concern” that serve as “watch lists”. Species on these lists are of limited distribution or the extent of their habitats has been reduced substantially, such that threat to their populations may be imminent. Thus, their populations should be monitored. They may receive special attention during environmental review as potential rare species, but do not have specific statutory protection. All potentially rare or sensitive species, or habitats capable of supporting rare species, are considered for environmental review per the CEQA Section 15380(b).

The CNPS, a non-governmental conservation organization, has developed CRPRs for plant species of concern in California in the Inventory of Rare and Endangered Plants (CNPS 2019). The CRPRs include lichens, vascular, and non-vascular plants, and are defined as follows:

- CRPR 1A Plants considered extinct.
- CRPR 1B Plants rare, threatened, or endangered in California and elsewhere.
- CRPR 2A Plants considered extinct in California but more common elsewhere.
- CRPR 2B Plants rare, threatened, or endangered in California but more common elsewhere.
- CRPR 3 Plants about which more information is needed - review list.
- CRPR 4 Plants of limited distribution-watch list.

The CRPRs are further described by the following threat code extensions:

- .1—seriously endangered in California;
- .2—fairly endangered in California;
- .3—not very endangered in California.

Although the CNPS is not a regulatory agency and plants on these lists have no formal regulatory protection, plants appearing as CRPR 1B or 2 are, in general, considered to meet CEQA’s Section 15380 criteria, and adverse effects on these species may be considered significant. Impacts on plants that are listed by the CNPS as CRPR 3 or 4 are also considered during CEQA review, although because these species are typically not as rare as those of CRPR 1B or 2, impacts on them are less frequently considered significant.

Compliance with CEQA Guidelines Section 15065(a) requires consideration of natural communities of special concern, in addition to plant and wildlife species. Vegetation types of “special concern” are tracked in Rarefind (CNDDDB 2019). Further, the CDFW ranks sensitive vegetation alliances based on their global (G) and state (S) rankings analogous to those provided in the CNDDDB. Global rankings (G1–G5) of natural communities reflect the overall condition (rarity and endangerment) of a habitat throughout its range, whereas S rankings reflect the condition of a habitat within California. If an alliance is marked as a G1–G3, all the associations within it would also be of high priority. The CDFW provides the Vegetation Classification and Mapping Program’s (VegCAMP) currently accepted list of vegetation alliances and associations (CDFW 2019).

Project Applicability: All potential impacts on biological resources will be considered during CEQA review of the Project. This biological resources report assesses these impacts to facilitate Project planning and CEQA review of the Project by the City of Saratoga.

3.2.4 California Fish and Game Code

Ephemeral and intermittent streams, rivers, creeks, dry washes, sloughs, blue line streams on USGS maps, and watercourses with subsurface flows fall under CDFW jurisdiction. Canals, aqueducts, irrigation ditches, and other means of water conveyance may also be considered streams if they support aquatic life, riparian vegetation, or stream-dependent terrestrial wildlife. A *stream* is defined in Title 14, California Code of Regulations Section 1.72, as “a body of water that flows at least periodically or intermittently through a bed or channel having banks and that supports fish and other aquatic life. This includes watercourses having surface or subsurface flow that supports or has supported riparian vegetation.” Using this definition, the CDFW extends its jurisdiction to encompass riparian habitats that function as part of a watercourse. California Fish and Game Code Section 2786 defines *riparian habitat* as “lands which contain habitat which grows close to and which depends upon soil moisture from a nearby freshwater source.” The lateral extent of a stream and associated riparian habitat that would fall under the jurisdiction of the CDFW can be measured in several ways, depending on the particular situation and the type of fish or wildlife at risk. At minimum, the CDFW would claim jurisdiction over a stream’s bed and bank. In areas that lack a vegetated riparian corridor, CDFW jurisdiction would be the same as USACE jurisdiction. Where riparian habitat is present, the outer edge of riparian vegetation is generally used as the line of demarcation between riparian and upland habitats.

Pursuant to California Fish and Game Code Section 1603, the CDFW regulates any Project proposed by any person that will “substantially divert or obstruct the natural flow or substantially change the bed, channel, or bank of any river, stream, or lake designated by the department, or use any material from the streambeds.” California Fish and Game Code Section 1602 requires an entity to notify the CDFW of any proposed activity that may modify a river, stream, or lake. If the CDFW determines that proposed activities may substantially adversely affect fish and wildlife resources, a Lake and Streambed Alteration Agreement (LSAA) must be prepared. The LSAA sets reasonable conditions necessary to protect fish and wildlife, and must comply with CEQA. The applicant may then proceed with the activity in accordance with the final LSAA.

Specific sections of the California Fish and Game Code describe regulations pertaining to protection of certain wildlife species. For example, Code Section 2000 prohibits take of any bird, mammal, fish, reptile, or amphibian except as provided by other sections of the code.

The California Fish and Game Code Sections 3503, 3513, and 3800 (and other sections and subsections) protect native birds, including their nests and eggs, from all forms of take. Disturbance that causes nest abandonment and/or loss of reproductive effort is considered “take” by the CDFW. Raptors (i.e., eagles, hawks, and owls) and their nests are specifically protected in California under Code Section 3503.5. Section 3503.5 states that it is “unlawful to take, possess, or destroy any birds in the order Falconiformes or Strigiformes (birds of prey) or to take, possess, or destroy the nest or eggs of any such bird except as otherwise provided by this code or any regulation adopted pursuant thereto.”

Bats and other non-game mammals are protected by California Fish and Game Code Section 4150, which states that all non-game mammals or parts thereof may not be taken or possessed except as provided otherwise in the

code or in accordance with regulations adopted by the commission. Activities resulting in mortality of non-game mammals (e.g., destruction of an occupied nonbreeding bat roost, resulting in the death of bats), or disturbance that causes the loss of a maternity colony of bats (resulting in the death of young), may be considered “take” by the CDFW.

Project Applicability: No rivers, streams, or riparian habitat are located within the Project study area. Most native bird, mammal, and other wildlife species that occur in the study area and in the immediate vicinity are protected by the California Fish and Game Code.

3.3 Local

3.3.1 City of Saratoga Tree Ordinance

According to the City of Saratoga Municipal Code §15-50.050, except as otherwise provided in §15-50.060, it is unlawful for any person to remove, damage, prune, or encroach upon, or cause to be removed, damaged, pruned, or encroached upon any protected tree in the City without first having obtained a tree removal, pruning or encroachment permit issued pursuant to this Article and authorizing the proposed action. A protected tree shall consist of any of the following:

- Any native tree having a diameter at breast height (DBH) of 6.0 inches or greater
- Any other tree having a DBH of 10.0 inches or greater.
- Any street tree, as defined in Section 15-50.020(v), regardless of size.
- Any heritage tree, as defined in Subsection 15-50.020(1) regardless of size.
- Any tree required to be planted or retained as a condition of any approval granted under this Chapter or Chapter 14 of this Code.
- Any tree required to be planted as a replacement, as provided in Section 15-50.170 of this Article. (Amended by Ord. 226 § 2 (part), 2003)

Project Applicability: While the parcels that compose the study area are currently located within unincorporated Santa Clara County, the land is intended to be annexed to the City of Saratoga boundary. Project construction may necessitate the removal of protected trees. The City’s Tree Ordinance applies only to private development projects. Therefore, if trees are removed after the annexation for a private development project, a permit through the City of Saratoga would be required.

3.3.2 City of Saratoga General Plan Ordinances

The City of Saratoga General Plan includes goals, policies, and programs relevant to the environmental factors potentially affected by the proposed Project, including the following from the Open Space and Conservation element:

- **Goal OSC 11:** Protect and enhance sensitive vegetative and wildlife habitat in the Saratoga Planning area.

- **Policy OSC 11.1:** Minimize development that would encroach into important wildlife habitats, limit or restrict normal range areas, or restrict access to water, food, or shelter. This includes limitations on the installation of barrier fencing in hillside areas.
- **Policy OSC 11.2:** Through the development and CEQA process, preserve, protect, and maintain riparian habitats and creek corridors. This includes requiring biological surveys of parcels of land that could contain sensitive species or their habitats prior to allowing development on these parcels.
- **Policy OSC 11.3:** The design of parking lots shall be evaluated for opportunities to reduce large continuous expanses of asphalt and to promote the establishment of visually interesting and aesthetically pleasing parking lots.
- **Policy OSC 11.4:** The City should provide information and assistance to the public in the preservation and care of native trees whose existence can be threatened by environmental stress and development.
- **Policy OSC 11.5:** Mature vegetation shall be preserved wherever possible.
- **Goal OSC 12:** Support appropriate management for sustaining the health and increasing the extent of arbor resources in the City. The specific vision is to increase overall tree cover, tree health and consequent tree benefits in an equitable, cost beneficial and sustainable manner.
 - **Policy OSC 12.1:** Development project should include the preservation of protected trees and other significant trees. Any adverse effect on the health and longevity of native oak trees, protected or other significant trees should be avoided through appropriate design measures and construction practices. When tree preservation is not feasible, individual development projects shall include appropriate tree replacement as approved by the City.
 - **Policy OSC 12.2:** Trees used for new or replacement plantings should be selected primarily for low water use characteristics.
 - **Policy OSC 12.3:** To further protect and enhance the City's arbor resources built on the City's Tree Regulations, the City should continue its support of tree protection programs.
 - **Policy OSC 12.4:** It is the City's policy that forested lands in the City's Sphere of Influence shall be managed to maximize environmental protection and to discourage logging to the maximum extent possible, consistent with proper fire protection standards and practices.
- **Goal OSC 13:** The preservation of native and other plant species indicative of Saratoga's cultural heritage shall be given priority over development and provide for the perpetuation of such species.
 - **Policy OSC 13.1:** To further preserve the City's inventory of arbor resources, the City should encourage owners to consider formal designation of heritage trees.
 - **Policy OSC 13.2:** The City shall encourage public knowledge, understanding and appreciation of the City's past and foster civic and neighborhood pride and sense of identity based upon the recognition and use of the City's heritage resources, particularly as it relates to the designation and preservation of heritage trees. This can be done by publicizing information about heritage trees and the benefits of designation of heritage trees on the City's Website.
 - **Policy OSC 13.3:** Fire safety shall be an important consideration when evaluating the preservation of native vegetation.

Project Applicability: Sensitive biological resources, including species and habitats, may occur on the Project site. All potential impacts on biological resources are addressed in the context of this Biological Resources Report.

Section 4. Environmental Setting

4.1 General Project Area Description

The approximately 80-acre (ac) study area is located in western Santa Clara County. It is located on the north side of Saratoga Creek and California State Route 9 (SR-9), primarily within the lower Calabazas Creek drainage (a tributary to Saratoga Creek). The study area is located within the *Cupertino, California* 7.5-minute USGS quadrangle on the northern flank of the Santa Cruz Mountains. The study area includes the developed area surrounding the Mountain Winery, located along the top of a ridge, and the densely vegetated upper slopes on the northeast and southwest sides of the property. The topography consists of a relatively level ridgetop with steep slopes ranging from approximately 20% - 80% grades along the perimeter. The southeast portion of the study area includes an abandoned gravel quarry on the eastern flank of the ridge top and an existing unnamed access road off of Pierce Road. Outside the developed area of the winery, the study area is surrounded on all sides by steeply sloped woodland and scrub habitat. Residential areas within Saratoga city limits are located downslope to the east and southeast of the study area.

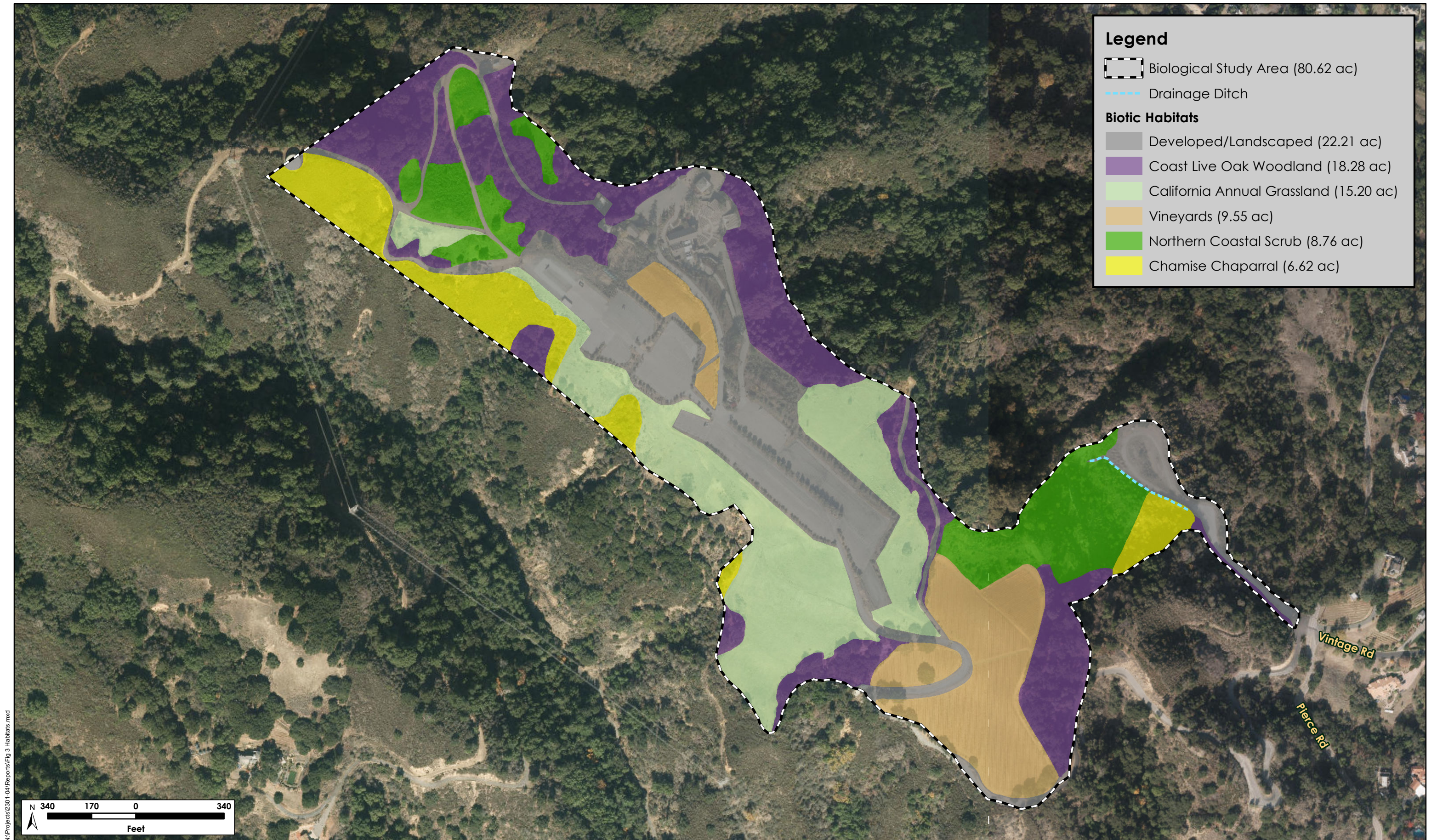
Elevations within the study area range from approximately 864 feet to 1,594 feet above sea level. The site is underlain by four soil types, Mouser-Katykat-Sanikara complex, 50 to 75 percent slopes; Sanikara-Mouser-Rock outcrop complex, 50 to 75 percent slopes; Katykat-Sanikara complex, 8 to 30 percent slopes; and Sanikara-Rock Outcrop complex, 75 to 100 percent slopes (NRCS 2019). These soils are all considered to be well-drained soils.

4.2 Biotic Habitats

Reconnaissance-level surveys identified six habitat types/land uses in the study area: developed/landscaped (22.21 ac), coast live oak woodland (18.28 ac), California annual grassland (15.20 ac), vineyards (9.55 ac), northern coastal scrub (8.76 ac), and chamise chaparral (6.62 ac) (Figure 3). These habitats are described in detail below. Plant species observed during the reconnaissance survey are listed in Appendix A.

4.2.1 Developed/Landscaped

Vegetation. The most extensive land cover type within the study area consists of developed/landscaped areas developed for the winery and music venue. This land cover type extends through the center of the Project area from the southeast corner of the study area through the northwestern-most section and includes several buildings, a concert grandstand, paved roads, dirt roads, parking lots, and paved sidewalks (Photo 1). While most of this habitat type consists of concrete, asphalt, buildings, and other impervious materials, landscaping is also present, including planted ornamental species such as olive trees (*Olea europaea*) lining the parking lots, as well as ornamental lilies (*Agapanthus* sp.) and ornamental grape vines (*Vitis* sp.) planted near the buildings. Additionally, coast live oak (*Quercus agrifolia*) and coyote brush (*Baccharis pilularis*) grow in the interface between



N:\Projects\2301-04\Reports\Fig 3 Habitats.mxd



H. T. HARVEY & ASSOCIATES
Ecological Consultants

Figure 3. Biotic Habitats

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the developed/landscaped habitat and the annual grassland. Areas of denuded ground in the abandoned gravel quarry, where vegetation has been completely removed, as well as the access road and turn-around to this area were also mapped as “developed”.

Wildlife. The wildlife most often associated with developed/landscaped areas are those that are tolerant of periodic human disturbances, including introduced species such as the European starling (*Sturnus vulgaris*), house mouse (*Mus musculus*), Norway rat (*Rattus norvegicus*), and black rat (*Rattus rattus*). Numerous common, native species are also able to utilize these habitats, especially the landscaped areas, including the western fence lizard (*Sceloporus occidentalis*), striped skunk (*Mephitis mephitis*), and a variety of birds, such as the house finch (*Haemorrhous mexicanus*), American crow (*Corvus brachyrhynchos*), Anna’s hummingbird (*Calypte anna*), California towhee (*Melospiza crissalis*), bushtit (*Psaltiriparus minimus*), and California scrub-jay (*Aphelocoma californica*), all of which were observed in the study area during the site visit. The buildings provide potentially suitable nesting habitat for house finches and black phoebes (*Sayornis nigricans*). No suitable habitat for bats or roosting barn owls was observed during the site visit.

4.2.2 Coast Live Oak Woodland

Vegetation. The coast live oak woodland within the study area is characterized by a closed canopy woodland dominated by coast live oak, although other tree species may be present, including California bay (*Umbellularia californica*), which is often a major component. Some areas within the coast live oak woodland habitat type also contain bigleaf maple (*Acer macrophyllum*) and California buckeye (*Aesculus californica*) as co-dominant overstory constituents



Photo 1. Developed/landscaped habitat.



Photo 2. Coast live oak woodland habitat.

(Photo 2). The understory layer is made up primarily of poison oak (*Toxicodendron diversilobum*) and coast live oak saplings. This habitat type is found mostly in the northwestern portion of the study area, as well as along the northern slopes of the Project study area.

Wildlife. Woodlands dominated by oaks typically support diverse animal communities in California. Coast live oaks provide cavities, bark crevices, and complex branching growth that create shelter for wildlife species, and these trees produce mast crops that are an important food source for many birds and mammals. Breeding birds in this habitat type include the acorn woodpecker (*Melanerpes formicivorus*), white-breasted nuthatch (*Sitta carolinensis*), Bewick's wren (*Thryomanes bewickii*), chestnut-backed chickadee (*Poecile rufescens*), Anna's hummingbird, California scrub-jay, Steller's jay (*Cyanocitta stelleri*), oak titmouse (*Baeolophus inornatus*), and Hutton's vireo (*Vireo huttoni*), all of which were detected during the site visit. Other bird species expected to use this habitat include the resident western screech-owl (*Megascops kennicottii*), as well as wintering birds including the ruby-crowned kinglet (*Regulus calendula*) and Townsend's warbler (*Setophaga townsendi*). Raptors such as the Cooper's hawk (*Accipiter cooperii*), red-shouldered hawk (*Buteo lineatus*), and red-tailed hawk (*Buteo jamaicensis*) may forage for prey in these woodlands. These species could also potentially nest in the limited oak woodlands present in the study area, but no active or inactive raptor nests or recently fledged young were detected during the site visit, suggesting that raptors did not nest in the study area in 2019.

Leaf litter and fallen logs in coast live oak woodlands in the study area may provide cover and foraging habitat for California slender salamanders (*Batrachoseps attenuatus*). Reptiles such as the northern alligator lizard (*Elgaria coerulea*) and western fence lizards are also expected to occur in the coast live oak forest. Mammals such as the native raccoon (*Procyon lotor*) and nonnative eastern gray squirrel (*Sciurus carolinensis*) and fox squirrel (*Sciurus niger*) may also occur in the coast live oak forest.

An examination of trees in the study area, including those in the coast live oak woodlands, did not detect any large cavities that might provide suitable roosting habitat for large colonies of bats. Several nests of San Francisco dusky-footed woodrats (*Neotoma fuscipes annectens*) were found in the coast live oak woodlands.

4.2.3 California Annual Grassland

Vegetation. California annual grassland is an herbaceous plant community dominated by nonnative annual grasses (Holland 1986; Sawyer and Keeler-Wolf 1995). California annual grassland in the study area occurs where grasses and forbs are dominant (Photo 3). In much of the study area, the California annual grassland habitat is disturbed by regular mowing and/or utilization for stockpiling materials. Characteristic dominant grass species in the grassland habitat include wild oats (*Avena fatua*), foxtail chess (*Bromus madritensis*), ripgut brome (*B. diandrus*), rat-tail fescue (*Festuca [Vulpia] myuros*), and Italian rye grass (*F. perennis*). Common forb species found within this habitat include many nonnative species such as yellow starthistle (*Centaurea solstitialis*), rose clover (*Trifolium hirtum*), and scarlet pimpernel (*Lysimachia arvensis*). Many of these nonnative forb species are ranked as moderately or highly invasive by the California Invasive Plant Council (Cal-IPC 2019). For example, yellow starthistle is highly invasive and has severe ecological impacts on physical processes, plant and

animal communities, and vegetation structure (Cal-IPC 2019). Occasional patches of the shrub Yerba Santa (*Eriodictyon californicum*) occur within the grassland.

Wildlife. Wildlife use of California annual grasslands in the study area is limited by frequent human disturbance, an abundance of nonnative and invasive species, and isolation of the grassland habitat remnants from more extensive grasslands. As a result, wildlife species associated with more extensive grasslands, such as the grasshopper sparrow (*Ammodramus savannarum*) and western meadowlark (*Sturnella neglecta*), are absent from the relatively small grasslands in the study area. Most of the bird species using this habitat during the breeding season nest in nearby landscaped areas, the adjacent coast live oak woodland, and the adjacent



Photo 3. California annual grassland habitat.

chamise chaparral and northern coastal scrub, and use areas of California annual grassland only for foraging. Such species include the California quail (*Callipepla californica*), California towhee, California thrasher (*Toxostoma redivivum*), California scrub-jay, mourning dove (*Zenaida macroura*), lesser goldfinch (*Spinus psaltria*), and dark-eyed junco (*Junco hyemalis*). Similarly, a few species nesting on nearby buildings, such as the house finch and black phoebe, also forage on or over the California annual grassland habitat. Several other species of birds use the California annual grassland during the nonbreeding season. These species, which include the golden-crowned sparrow (*Zonotrichia atricapilla*), fox sparrow (*Passerella illiaca*), and white-crowned sparrow (*Zonotrichia leucophrys*), forage on the ground or in herbaceous vegetation, primarily for seeds.

Few species of reptiles and amphibians occur in the California annual grassland in the study area due to its disturbed nature and low habitat heterogeneity. Nevertheless, reptiles such as the western fence lizard and gopher snake (*Pituophis melanoleucus*) occur in this habitat type. Small mammals expected to be present include the native western harvest mouse (*Reithrodontomys megalotis*) and nonnative house mouse, Norway rat, and black rat. Small burrowing mammals, such as the Botta's pocket gopher (*Thomomys bottae*) are also present, and larger mammals, such as the striped skunk, Virginia opossum (*Didelphis virginiana*), raccoon, and mountain lion (*Puma concolor*) are likely to occur here. No burrows of California ground squirrels (*Otospermophilus beecheyi*) were observed in grasslands in the study area during the site visit.

4.2.4 Vineyards

Vegetation. Vineyards are mostly located in the southeastern portion of the study area, along the road to the Mountain Winery buildings. Additionally, there are vineyards just north of the small parking lot, separating the lot from the buildings and concert grandstands. Vegetation within the vineyards consists primarily of ruderal (i.e., disturbed) weedy species such as yellow starthistle, hairy cat's ear (*Hypochaeris radicata*), and wild oats along the perimeter and within the rows of vines. This habitat is affected by regular maintenance and management, including efforts to control weedy vegetation between the vine rows.



Photo 4. Vineyard habitat.

Wildlife. The vineyards habitat within the study area is characterized by young grape vines that have little structural complexity, and therefore provide limited foraging habitat for wildlife species. Nevertheless, a number of wildlife species will forage in vineyards, including the raccoon and gray fox (*Urocyon cinereoargenteus*). Other wildlife species that occur in this habitat are generalist species that occur in adjacent habitats and opportunistically forage in vineyards, such as the mule deer (*Odocoileus hemionus columbianus*), California quail, house finch, brush rabbit (*Sylvilagus bachmani*), and western fence lizard.

Agricultural pesticides reduce the availability of invertebrate prey in vineyards, but small numbers of insectivores such as the black phoebe and western bluebird will forage aerially for insects in this habitat. California quail, California towhee, and wintering sparrows, such as white-crowned and golden-crowned sparrows. Generalist species that occur in adjacent habitats, such as California scrub jay, may forage on the edges of this habitat. Western



Photo 5. Northern coastal scrub habitat.

fence lizards may forage around and on

the vines and the associated infrastructure that supports the vines.

4.2.5 Northern Coastal Scrub

Vegetation. Northern coastal scrub habitat in the study area occurs around a facilities storage area and area of annual grassland in the northern portion of the study area, as well as in between stands of coast live oak woodland located around the northern perimeter of the study area boundary. This scrub habitat type is dominated by coyote brush, with occasional co-dominant shrub species such as poison oak and sticky monkey flower (*Diplacus aurantiacus*). The shrub canopy is continuous and medium stature (four to six feet tall). Typically it represents the first stage (and least mature) of scrub occupation of former grassland sites in the succession stage (Ford and Hayes 2007), and that appears to be the case within the Project study area. Though dominated primarily by coyote brush, the invasive shrub French broom (*Genista monspessulana*) is also common, and forms thickets in portions of this habitat type. Associated herbaceous vegetation includes wild oats, Italian rye grass, and Italian thistle (*Carduus pycnocephalus*). Northern coast scrub habitat was also mapped in the abandoned gravel quarry where vegetation consisted of a mix of coyote brush, California sagebrush (*Artemisia californica*), toyon (*Heteromeles arbutifolia*), as well as abundant stands of the invasive grass, pampas grass (*Cortaderia jubata*).

A roadside ditch was mapped along the road at the base of the abandoned gravel quarry area, adjacent to areas mapped as northern coastal scrub and chamise chaparral. The ditch was dug out to convey stormwater flow from eroded areas in the quarry area. The ditch was approximately 2 feet wide and was dry at the time of the July field survey. A few small, narrow patches of cattails (*Typha latifolia*) are located intermittently at the end the east end of the ditch. These are no more than six feet long and are intermixed with pampas grass and other upland grasses. A narrow patch of arroyo willow (*Salix lasiolepis*) has colonized a portion of the ditch as well towards its west end, before it crosses under the road through a plastic 24 inch corrugated culvert. After passing under the road, the ditch flows downhill and off-site where it likely flows into an unnamed intermittent drainage approximately 500 feet downslope and to the northeast of the Project study area. As described in Section 5.3, portions of this feature possess wetland characteristics.

Wildlife. Coastal scrub communities are typically dry, have relatively short canopy heights, and are homogeneous in structure. Therefore, wildlife species diversity in coastal scrub is often low. Mammals that use coastal scrub habitats for cover include the coyote (*Canis latrans*), bobcat (*Lynx rufus*), and brush rabbit (*Sylvilagus bachmani*), among others. Several nests of San Francisco dusky-footed woodrats were observed in this habitat during the site visit. Bird species that nest in these habitats include the California thrasher, blue-gray gnatcatcher (*Polioptila caerulea*), California towhee, spotted towhee (*Pipilo maculatus*), California quail, wrentit (*Chamaea fasciata*), lesser goldfinch, and Anna's hummingbird, all of which were detected during the site visit. In winter, sparrows such as the golden-crowned sparrow, white-crowned sparrow, and fox sparrow are also expected to occur in this habitat. Reptiles that occur here include the gopher snake, western rattlesnake (*Crotalus viridis*), southern alligator lizard (*Elgaria multicarinata*), striped racer (*Masticophis lateralis*), and western fence lizard. Amphibians are usually absent or scarce due to the dry conditions.

The roadside ditch supports flowing water only during and for short durations following rain events, so it provides no aquatic habitat for any aquatic wildlife species.

4.2.6 Chamise Chaparral

Vegetation. Chamise chaparral, which occurs in the northeastern portion of the study area (Photo 6), is defined by a dense, closed canopy of chamise (*Adenostoma fasciculatum*) occurring on south-facing, moderate to steep slopes. Shrub canopy height was slightly taller than that of the northern coastal scrub described above. Other shrub species observed within this scrub type included big berry manzanita (*Arctostaphylos glauca*), black sage (*Salvia mellifera*) and sticky monkey flower. Herbaceous vegetation is sparse due to the dense cover of shrub species, but nonnative grasses and forbs such as those mentioned in the description of California annual grassland were found around the perimeter of this habitat type.

Wildlife. Like northern coastal scrub, chamise chaparral communities are typically dry, have relatively short canopy heights, and are homogeneous in structure. Therefore, wildlife species diversity in chamise chaparral is often low, and wildlife communities are similar to those that occur in northern coastal scrub. Mammals that use chamise chaparral and coastal scrub habitats for cover include the coyote, bobcat, and brush rabbit, among others. Nests of San Francisco dusky-footed woodrats were present in this community. Bird species that nest in these habitats include the California thrasher, blue-gray gnatcatcher, California towhee, spotted



Photo 6. Chamise chaparral habitat in the western portion of the study area.

towhee, California quail, wrentit, lesser goldfinch, and Anna's hummingbird, all of which were detected during the site visit. In winter, sparrows such as the golden-crowned sparrow, white-crowned sparrow, and fox sparrow are also expected to occur in this habitat. Reptiles that occur here include the gopher snake, western rattlesnake, southern alligator lizard, striped racer, and western fence lizard. Amphibians are usually absent or scarce due to the dry conditions.

Section 5. Special-Status Species and Sensitive Habitats

CEQA requires assessment of the effects of a project on species that are protected by state, federal, or local governments as “threatened, rare, or endangered”; such species are typically described as “special-status species”. For the purpose of the environmental review of the Project, special-status species have been defined as described below. Impacts on these species are regulated by some of the federal, state, and local laws and ordinances described in Section 3.0 above.

For purposes of this analysis, “special-status” plants are considered plant species that are:

- Listed under FESA as threatened, endangered, proposed threatened, proposed endangered, or a candidate species.
- Listed under CESA as threatened, endangered, rare, or a candidate species.
- Listed by the CNPS as CRPR 1A, 1B, 2, 3, or 4.

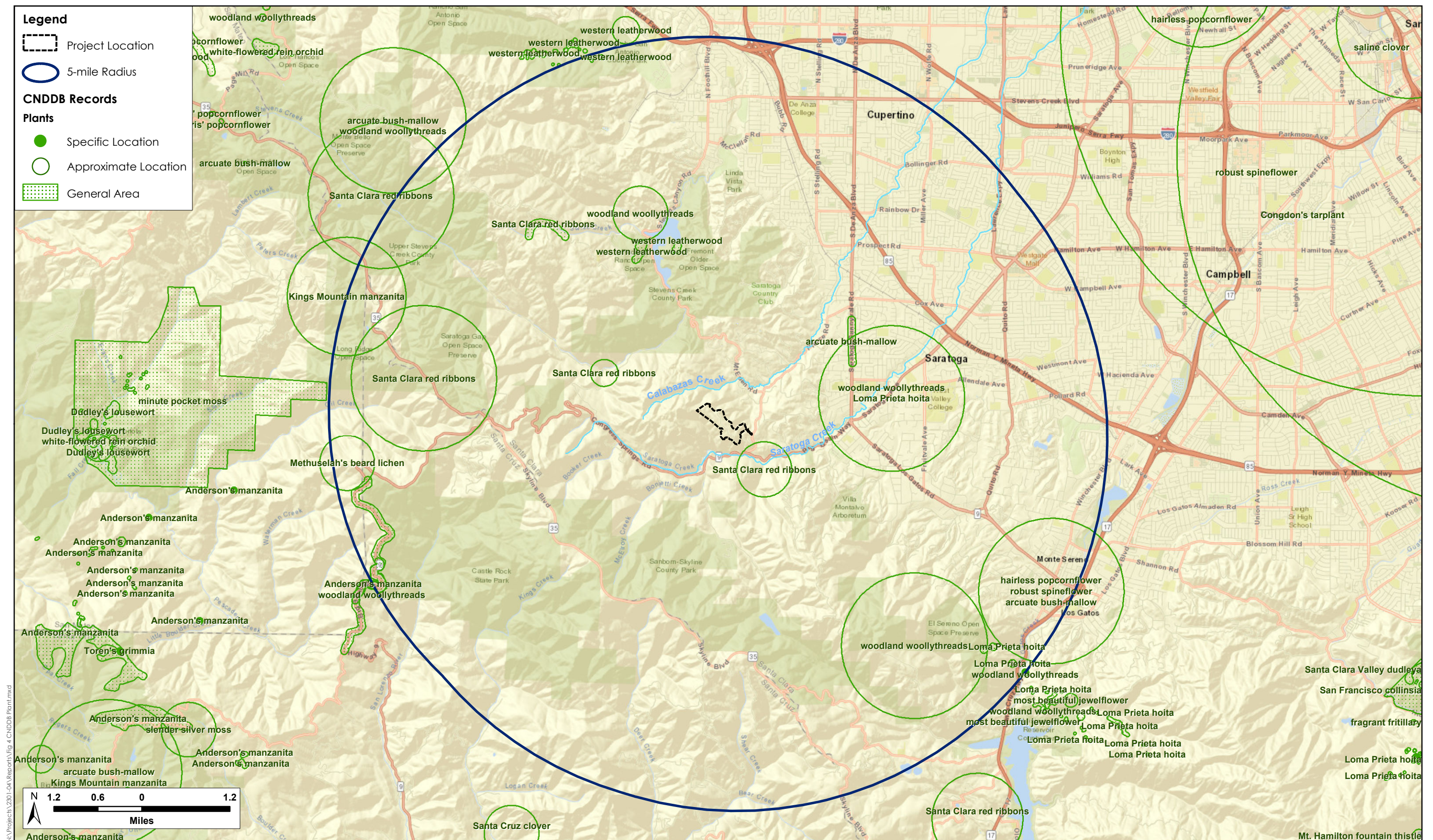
For purposes of this analysis, “special-status” animals are considered animal species that are:

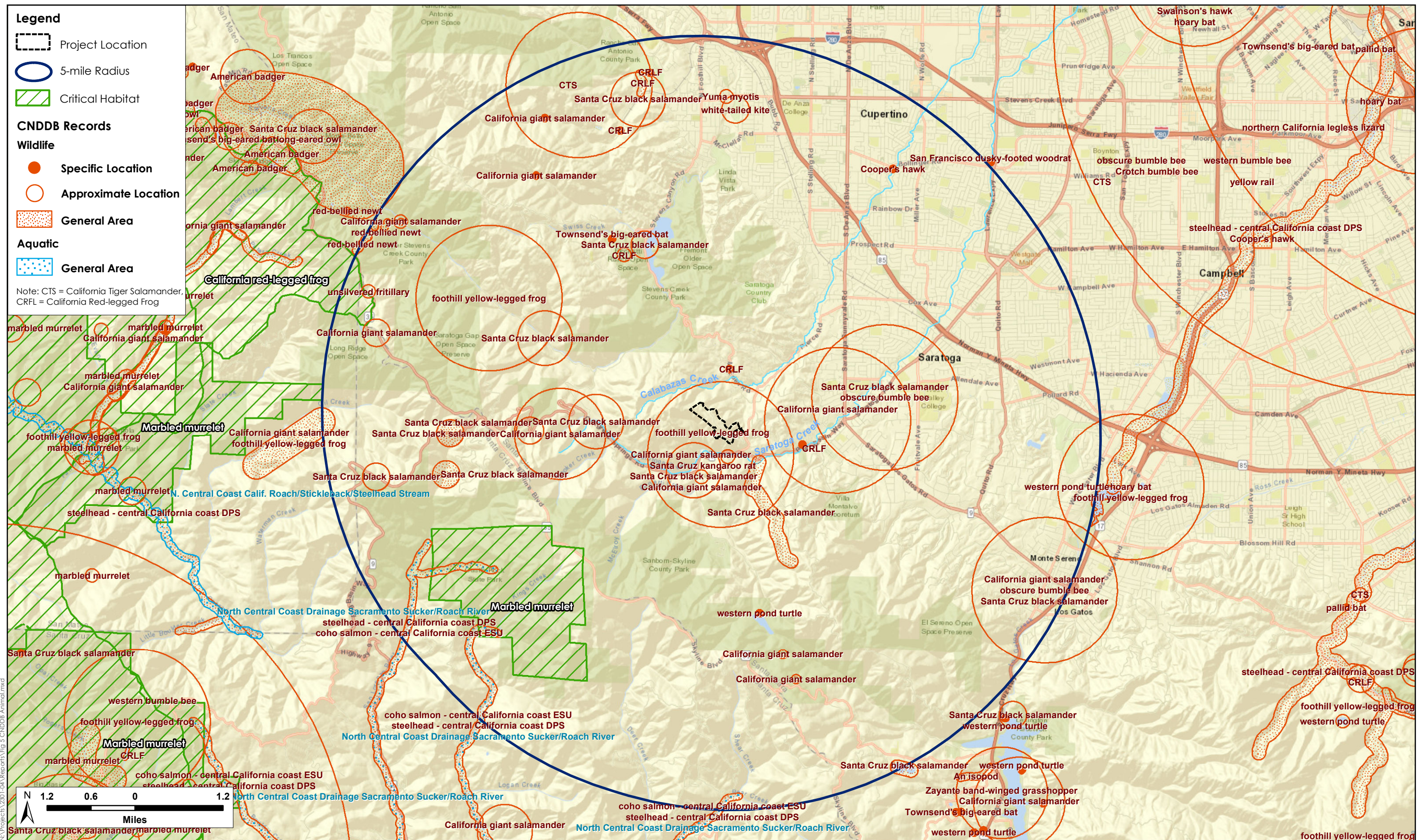
- Listed under FESA as threatened, endangered, proposed threatened, proposed endangered, or a candidate species.
- Listed under CESA as threatened, endangered, or a candidate threatened or endangered species.
- Designated by the CDFW as a California species of special concern.
- Listed in the California Fish and Game Code as fully protected species (fully protected birds are provided in Section 3511, mammals in Section 4700, reptiles and amphibians in Section 5050, and fish in Section 5515).

Information concerning threatened, endangered, and other special-status species that potentially occur in the study area was collected from several sources and reviewed by H. T. Harvey & Associates biologists as described in Section 2.1 above. Figure 4 depicts CNDDDB records of special-status plant species in the general vicinity of the study area and Figure 5 depicts CNDDDB records of special-status animal species. These generalized maps show areas where special-status species are known to occur or have occurred historically.

5.1 Special-Status Plant Species

The CNPS (2019) and CNDDDB (2019) databases identify 105 special-status plant species as potentially occurring in at least one of the nine USGS quadrangles containing or surrounding the study area for CRPR 1 or 2 species, or in Santa Clara County for CRPR 3 and 4 species. Ninety-nine of those potentially occurring special-status plant species were determined to be absent from the study area for at least one of the following reasons: (1) lack of suitable habitat types; (2) absence of specific microhabitat or edaphic requirements, such as serpentine soils; (3) the elevation range of the species is outside of the range on the study area; and/or (4) the





species is considered extirpated. Appendix B lists these plants along with the basis for the determination of absence. Suitable habitat, edaphic requirements, and elevation range were determined to be present in the study area for six plant species: Anderson's manzanita (*Arctostaphylos andersonii*), King's Mountain manzanita (*Arctostaphylos regismontana*), Brewer's calandrinia (*Calandrinia breweri*), Santa Clara red ribbons (*Clarkia concinna* ssp. *automixa*), western leatherwood (*Dirca occidentalis*), and arcuate bush mallow (*Malacothamnus arcuatus*). These species are discussed in more detail below.

Anderson's manzanita (*Arctostaphylos andersonii*). Federal Listing Status: None; State Listing Status: None; CRPR 1B.2. Anderson's manzanita is a perennial evergreen shrub that blooms from November to May. This species occurs in the openings and along the edges of broadleaved upland forest, chaparral, and north coast coniferous forest habitats at an elevation range of approximately 760 to 2,495 feet. The species is endemic to Santa Clara, Santa Cruz, and San Mateo counties (CNPS 2019). Known populations of Anderson's manzanita occur along Highway 9 approximately four miles west of the Project study area in forest openings along the road (CNDDDB 2019). The chaparral in the study area as shown on Figure 3 provides potential suitable habitat for Anderson's manzanita. The only species of manzanita observed on the property during the field survey was bigberry manzanita (*Arctostaphylos glauca*), and Anderson's manzanita would likely have been identifiable during this survey if it were present. Therefore the potential for this species to occur within the study area is low. However, because the reconnaissance-level field survey did not include a focused survey of all chaparral habitat within the study area specifically for this species, there is still some potential for this species to be present.

King's Mountain manzanita (*Arctostaphylos regismontana*). Federal Listing Status: None; State Listing Status: None; CRPR 1B.2. King's Mountain manzanita is a perennial evergreen shrub that blooms from December to April. It occurs in broadleaved upland forest, chaparral, or coniferous forests in granitic or sandstone soils at an elevational range between 730 and 2,395 feet. King's Mountain manzanita is known to exist in Santa Clara, Santa Cruz, and San Mateo counties. CNDDDB occurrence EO3 is located approximately four miles west of the study area, at the head of Peter's Creek, along King's Mountain Road in the Santa Cruz Mountains at an elevation of approximately 2,300 feet (CNDDDB 2019). It is located in mixed oak woodland habitat similar to those found in the northern portion of the study area. In the study area, openings along the edges of coast live oak woodland habitat in the study area as shown on Figure 3 could support the King's mountain manzanita. The only species of manzanita observed on the property during the field survey was bigberry manzanita, and King's Mountain manzanita would likely have been identifiable during this survey if it were present. Therefore the potential for this species to occur within the study area is low. However, because the reconnaissance-level field survey did not include a focused survey of all chaparral habitat within the study area specifically for this species, there is still some potential for this species to be present.

Brewer's calandrinia (*Calandrinia breweri*). Federal Listing Status: None; State Listing Status: None; CRPR 4.2. Brewer's calandrinia is an annual herb in the Miner's lettuce family (Montiaceae) that blooms from March to June, and rarely as early as January, depending on the microsite and annual climactic conditions. This species occurs in disturbed or burned sites within chaparral and coastal scrub habitats at an elevational range of approximately 30 to 4,005 feet. Brewer's calandrinia is known from 17 occurrences in the North and Central

Coast ranges (CNDDDB 2019). An historic collection is known from the Steven's Creek Reservoir, approximately two miles north of the study area (CCH 2019). This nearby population was found on the disturbed slopes of chaparral habitat, similar to those found in the northern portion of the study area. Therefore, there is some potential for this species to be present within the study area, though only in areas shown on Figure 3 as supporting chamise chaparral.

Santa Clara red ribbons (*Clarkia concinna* ssp. *automixa*). Federal Listing Status: None; State Listing Status: None; CNPS List: 4.3. Santa Clara red ribbons is an annual herb in the evening-primrose family (Onagraceae) that blooms from May to June, and in rare cases, as early as April or as late as July, depending on the microsite and annual climactic conditions. This species occurs in chaparral and cismontane woodland habitats in San Francisco Bay Area foothills at an elevational range of approximately 295 to 4,950 feet and is endemic to Alameda, Santa Clara and Santa Cruz Counties (CNPS 2019). A historic CNDDDB occurrence, EO16, is mapped immediately south of the study area on the other side of Highway 9 in Congress Springs Canyon (CNDDDB 2019). Openings on the edges of northern coastal scrub and chaparral in the study area as shown on Figure 3 provide potentially suitable habitat for Santa Clara red ribbons, and the species could potentially occur in that area, but we do not expect it to occur elsewhere within the Project study area.

Western leatherwood (*Dirca occidentalis*). Federal Listing Status: None; State Listing Status: None; CRPR 1B.2. Western leatherwood is a perennial deciduous shrub in the Thymelaeaceae family that blooms from January to April. This species occurs in mesic sights within broadleaved upland forest, closed-cone coniferous forest, brushy slopes of chaparral, cismontane woodland, north coast coniferous forest, riparian forest, and riparian woodland habitats at an elevational range of approximately 82 to 1,394 feet and is endemic to Alameda, Contra Costa, Marin, Santa Clara, San Mateo, and Sonoma counties (CNPS 2019). Two recent CNDDDB occurrences, EO57 and EO58, are mapped approximately two miles north of the study area, along a trail near the Stevens Creek Reservoir in Pichetti Ranch Regional Open Space (CNDDDB 2019). Coast live oak woodland habitat in the study area as shown on Figure 3 could provide potential habitat for western leatherwood.

Arcuate bush mallow (*Malacothamnus arcuatus*). Federal Listing Status: None; State Listing Status: None; CRPR 1B.2. Arcuate bush mallow is a perennial deciduous shrub in the Mallow family that blooms from January to April. This species occurs in chaparral and cismontane woodland at an elevational range of approximately 45 to 1,170 feet and is endemic to Santa Cruz, Santa Clara, and San Mateo counties (CNPS 2019). The nearest CNDDDB occurrences of arcuate bush mallow are over 100 years old (CNDDDB 2019). The chaparral habitat in the study area as shown on Figure 3 could provide potential habitat for arcuate bush mallow.

5.2 Special-Status Animal Species

The legal status and likelihood of occurrence in the study area of special-status animal species known to occur, or potentially occurring, in the surrounding region are presented in Table 1. Most of the special-status species listed in Table 1 are not expected to occur in the study area because it lacks suitable habitat, is outside the

known range of the species, and/or is isolated from the nearest known extant populations by development or otherwise unsuitable habitat. Animal species not expected to occur in the study area for these reasons include the California tiger salamander (*Ambystoma californiense*), foothill yellow-legged frog (*Rana boylei*), western pond turtle (*Actinemys marmorata*), bald eagle (*Haliaeetus leucocephalus*), long-eared owl (*Asio otus*), burrowing owl (*Athene cunicularia*), loggerhead shrike (*Lanius ludovicianus*), and American badger (*Taxidea taxus*). No aquatic habitats suitable to support special-status fish species are present within the study area.

Two salamander species, the California giant salamander (*Dicamptodon ensatus*) and the Santa Cruz black salamander (*Aneides flavipunctatus niger*), are both known to occur in the vicinity in the Santa Cruz Mountains, primarily along the Saratoga Creek/SR-9 corridor. However, both of these species are closely associated with mountain streams and seeps, and are not known to disperse away from this habitat. Therefore, because the study area is located entirely on a ridgetop and does not contain any mountain streams and/or seeps, these species are determined to be absent.

A number of special-status bird species can occasionally occur in the study area as nonbreeding foragers (i.e., they do not nest in the study area). These are the peregrine falcon (*Falco peregrinus anatum*) and golden eagle (*Aquila chrysaetos*). The pallid bat (*Antrozous pallidus*), western red bat (*Lasiurus blossevillei*), and Townsend's big-eared bat (*Corynorhinus townsendii*) are California species of special concern that may also forage aerially over habitats in the study area. These species are not expected to nest, roost, or breed in or immediately adjacent to the study area, and will be affected very little, if at all, by proposed projects under the annexation. In addition, the Vaux's swift (*Chaetura vauxi*) and yellow warbler (*Setophaga petechia*) are bird species that are considered California species of special concern only when they are nesting; although they may occur occasionally within the study area as nonbreeding migrants, no suitable nesting habitat for these species occurs in the study area. Because these species are only considered species of special concern when nesting, they are not a "special-status species" when they are a nonbreeding visitor to the study area.

Four special-status animal species—the California red-legged frog, white-tailed kite (*Elanus leucurus*), olive-sided flycatcher (*Contopus cooperi*), and San Francisco dusky-footed woodrat—have the potential to occur, or are known to occur, in the study area. Expanded descriptions for each of these species are provided following Table 1.

Table 1. Special-Status Animal Species, Their Status, and Potential Occurrence in the Study Area

Name	*Status	Habitat	Potential for Occurrence in the Study Area
Federal or State Endangered, Rare, or Threatened Species			
California red-legged frog (<i>Rana draytonii</i>)	FT, CSSC	Streams, freshwater pools, and ponds with emergent or overhanging vegetation.	May be Present. Although suitable breeding habitat - pools with emergent vegetation - is not present in the study area, there is a 2007 breeding record from Calabazas Creek, 0.54 mi from the study area; a recent record from Saratoga Creek, approximately 0.91 mi from the study area (CNDDDB 2019); and potentially suitable breeding habitat in Quarry Park, approximately 0.7 mi from the study area (i.e., within dispersal distance) (City of Saratoga 2014). Thus, although red-legged frogs are not expected to breed in the study area, non-breeding individuals can potentially disperse through the study area on an occasional basis (most likely during the wet season).
California tiger salamander (<i>Ambystoma californiense</i>)	FT, ST	Vernal or temporary pools in annual grasslands or open woodlands.	Absent. No suitable habitat is present in the study area. Further, populations have been extirpated from portions of Santa Clara County due to habitat loss, and the species is now considered absent from the Project vicinity, including the study area. The closest occurrence in the Project vicinity is adjacent to the southern edge of Rancho San Antonio Open Space Preserve, which is approximately 3.8 mi north of the study area (CNDDDB 2019). Determined to be absent.
Foothill yellow-legged frog (<i>Rana boylei</i>)	SC, CSSC	Partially shaded shallow streams and riffles with a rocky substrate. Occurs in a variety of habitats in coast ranges.	Absent. There is no aquatic habitat suitable for the foothill yellow-legged frog present in the study area, although there are several historical records of this species from the Saratoga Creek corridor, within the Project vicinity, as well as a record near the crest of the Santa Cruz Mountains (CNDDDB 2019). However, there are no recent records (all are before 1958) of this species from the study area (CNDDDB 2019), and it is considered extirpated from the Project vicinity. Determined to be absent.
Bald eagle (<i>Haliaeetus leucocephalus</i>)	SE, SP	Occurs mainly along seacoasts, rivers, and lakes; nests in tall trees or in cliffs, occasionally on electrical towers. Feeds mostly on fish.	Absent. No suitable nesting or foraging habitat is present in the study area. Determined to be absent.

Name	*Status	Habitat	Potential for Occurrence in the Study Area
California Species of Special Concern			
California giant salamander (<i>Dicamptodon ensatus</i>)	CSSC	Moist forests and riparian zones in or near clear, cold streams or seeps.	Absent. This species is found in the Santa Cruz Mountains and foothills, typically in moist forests and riparian zones in or near streams or seeps, habitats which are absent from the study area. Although there are numerous records, historical and recent, in the Project vicinity (CNDDDB 2019), this species is strongly associated with mountain streams and seeps, and does not occur away from these habitats. Therefore, this species is determined to be absent from the study area.
Santa Cruz black salamander (<i>Aneides flavipunctatus niger</i>)	CSSC	Moist forests and riparian zones in or near clear, cold streams or seeps.	Absent. This species is found in the Santa Cruz Mountains and foothills, typically in moist forests and riparian zones in or near streams or seeps, habitats which are absent from the study area. Although there are numerous records, historical and recent, in the Project vicinity (CNDDDB 2019), this species is strongly associated with mountain streams and seeps, and does not occur away from these habitats. Therefore, this species is determined to be absent from the study area.
Western pond turtle (<i>Actinemys marmorata</i>)	CSSC	Permanent or nearly permanent water in a variety of habitats.	Absent. There are no ponds, or any other type of suitable aquatic habitat located within the study area. Therefore, the species is not expected to occur in the study area at all.
Burrowing owl (<i>Athene cunicularia</i>)	CSSC	Open grasslands and ruderal habitats with suitable burrows, usually those made by California ground squirrels (<i>Otospermophilus beecheyi</i>).	Absent. Although grasslands are present in the study area, the lack of burrows on or near the study area precludes this species' presence. The closest known records are of wintering birds at the Oka Ponds in Campbell, on the valley floor, 5.8 mi from the study area, and at the Russian Ridge Open Space Preserve, 8.5 mi from the study area (CNDDDB 2019; Cornell Lab of Ornithology 2019). Determined to be absent.
Long-eared owl (<i>Asio otus</i>)	CSSC (nesting)	Riparian bottomlands with tall, dense willows (<i>Salix</i> spp.) and cottonwood (<i>Populus fremontii</i>) stands. In the Santa Cruz Mountains, also occurs in dense live oak and California Bay woodlands along upland streams; forages primarily in adjacent open areas.	Absent. The long-eared owl is uncommon in the Santa Cruz Mountains in appropriate habitat, but it is relatively rare and very secretive (CNNDDB 2019; Cornell Lab of Ornithology 2019). The closest records to the study area are 5.27 mi north-northwest in the Monte Bello Open Space Preserve. Unmowed grasslands typically used by this species as foraging habitat are not present in the study area or adjacent areas. Determined to be absent.

Name	*Status	Habitat	Potential for Occurrence in the Study Area
Vaux's swift (<i>Chaetura vauxi</i>)	CSSC (nesting)	Nests in snags in coastal coniferous forests or, occasionally, in chimneys; forages aerially.	Absent as Breeder. In western Santa Clara County, known to nest in chimneys and may nest in snags in coniferous forest (Rottenborn 2007). Snags large enough to provide suitable nesting habitat for this species were not detected in the study area during the reconnaissance survey. May forage aerially over the site. Because this species is only considered special-status when nesting, individuals would not be considered special-status when they occur on the site as a migrant.
Yellow warbler (<i>Setophaga petechia</i>)	CSSC (nesting)	Nests in dense stands of willow and other riparian habitat.	Absent as Breeder. Dense stands of cottonwood and willow trees, which this species typically uses as nesting and foraging habitat, are absent from the study area. May occur in the study area as a migrant.
Olive-sided flycatcher (<i>Contopus cooperi</i>)	CSSC (nesting)	Breeds in mature forests with open canopies, along forest edges in more densely vegetated areas, in recently burned forest habitats, and in selectively harvested landscapes	May be Present. The eucalyptus groves located in the study area as well as other habitats in the study area provide suitable nesting habitat for this species. The species is known to nest in similar habitats in the vicinity (Bousman 2007) and is often detected in nearby parks during the nesting season (Cornell Lab of Ornithology 2019). Therefore, one pair could potentially nest and forage in the study area.
Loggerhead shrike (<i>Lanius ludovicianus</i>)	CSSC (nesting)	Nests in tall shrubs and dense trees; forages in grasslands, marshes, and ruderal habitats.	Absent. Open habitats in the study area are too restricted and too isolated from vast expanses of open habitat elsewhere to support this species. Determined to be absent.
San Francisco dusky-footed woodrat (<i>Neotoma fuscipes annectens</i>)	CSSC	Woodlands and scrub habitats throughout the Santa Cruz Mountains and portions of the South Bay.	Present. This species is known to occur in the study area, with moderate densities of nests occurring in the coast live oak woodlands, and where coast live oak interfaces with northern coastal shrub.
Townsend's big-eared bat (<i>Corynorhinus townsendii</i>)	CSSC	Roosts in caves and mine tunnels, and occasionally in deep crevices in trees such as redwoods or in abandoned buildings, in a variety of habitats.	Absent as Breeder. Suitably large cavities to support roosting are not present in the study area. However, the species may be present as an occasional migrant or forager. The closest known location to the study area is from Picchetti Ranch Open Space Preserve, approximately 2.4 mi north-northwest of study area (CNDDDB 2019).
Pallid bat (<i>Antrozous pallidus</i>)	CSSC	Forages over many habitats; roosts in caves, rock outcrops, buildings, and hollow trees.	Absent as Breeder. Suitable roosting and or maternity habitat was not detected in the study area during the reconnaissance survey. There are no recent records in the Project region, but the species could forage over the study area (CNDDDB 2019).

Name	*Status	Habitat	Potential for Occurrence in the Study Area
Western red bat (<i>Lasiurus blossevillei</i>)	CSSC	Roosts in foliage in forest or woodlands, especially in or near riparian habitat.	Absent as Breeder. May occur in low numbers as a migrant and winter resident, but does not breed in the study area. Not expected to roost in foliage in trees in the study area, but may do so along edges of the Project site.
California Fully Protected Species			
Golden eagle (<i>Aquila chrysaetos</i>)	FP	Breeds on cliffs or in large trees (rarely on electrical towers), forages in open areas.	Absent as Breeder. No suitable nesting is present in the study area, but could forage in the ruderal grassland and adjacent chamise chaparral and northern coastal scrub.
White-tailed kite (<i>Elanus leucurus</i>)	SP	Nests in trees and forages in extensive grasslands or marshes.	May be Present. Potentially suitable foraging habitat for this species is present in the form of open, ruderal grasslands in the study area. Potential nesting habitat in the study area is present in the form of eucalyptus groves. May be present.

SPECIAL-STATUS SPECIES CODE DESIGNATIONS

FE = Federally listed Endangered
 FT = Federally listed Threatened
 SE = State listed Endangered
 ST = State listed Threatened
 SC = State Candidate for listing
 CSSC = California Species of Special Concern
 SP = State Fully Protected Species

5.2.1 Federal and State Listed Species

California Red-legged Frog (*Rana draytonii*). **Federal status: Threatened; State status: Species of Special Concern.** The California red-legged frog was listed as threatened in June 1996 (USFWS 1996) based largely on a significant range reduction and continued threats to surviving populations. Critical habitat was most recently designated in March 2010 (USFWS 2010). The historical distribution of the California red-legged frog extended from the city of Redding in the Central Valley and Point Reyes National Seashore along the coast, south to Baja California, Mexico. The species' current distribution includes isolated locations in the Sierra Nevada and the San Francisco Bay area, and along the central coast (USFWS 2002).

The California red-legged frog inhabits perennial freshwater pools, streams, and ponds throughout the Central California Coast Range and isolated portions of the western slope of the Sierra Nevada (Fellers 2005). Its preferred breeding habitat consists of deep perennial pools with emergent vegetation for attaching egg clusters (Fellers 2005), as well as shallow benches to act as nurseries for juveniles (Jennings and Hayes 1994). Non-breeding frogs may be found adjacent to streams and ponds in grasslands and woodlands, and may travel over 2 miles from their breeding locations across a variety of upland habitats to suitable nonbreeding habitats (Bulger et al. 2003, Fellers and Kleeman 2007). However, the distance moved is highly site-dependent, as influenced by the local landscape (Fellers and Kleeman 2007).

No suitable breeding or foraging habitat for the red-legged frog exists in the study area, and the study area does not contain designated critical habitat. Thus, red-legged frogs are not expected to breed or regularly forage in the study area. However, there is a May 2007 breeding record from Calabazas Creek, approximately 0.54 mile from the study area, where one adult and three tadpoles were found in a small pool just downstream and adjacent to the Mount Eden Road culvert over Calabazas Creek (CNDDDB 2019). Based on an analysis of aerial photographs, this small pool is the nearest suitable California red-legged frog breeding habitat to the study area. Potentially suitable breeding habitat has also been identified in Quarry Park, approximately 0.7 miles from the study area (i.e., within dispersal distance) (City of Saratoga 2014) and south of Calabazas Creek. Any red-legged frog moving between Quarry Park, Saratoga Creek, and Calabazas Creek would likely move across the SR-9/Saratoga Creek corridor, rather than across the study area because the land surrounding the study area is occupied by steep terrain on all sides. Likewise, frogs are not expected to disperse across the study area from Calabazas Creek because there is no suitable aquatic habitat north and west of the study area within the species' known dispersal range. The roadside ditch in the eastern portion of the study area does not provide suitable pools, nor any flowing water except during and shortly after rain events, and it is not expected to provide an attractant to red-legged frogs. No other suitable or potentially suitable breeding habitat is known within the species known dispersal range of the study area. Thus, due to the lack of suitable breeding and foraging habitat for the red-legged frog in the study area, the low quality of the nearest potential breeding habitat (there have been no subsequent records from Calabazas Creek, and it is a small roadside pool) and its separation from the site by residential development and roadways, and the distance from the study area to the nearest known red-legged frog occurrences or potential habitat to the north or west, California red-legged frogs are not expected to occur in the study area. However, this species is capable of long-distance dispersal events, and we cannot

rule out the possibility that non-breeding individuals may occur in the study area on an occasional basis. If the species is present at all, it is most likely to be present during wet-season dispersal.

5.2.2 California Fully Protected Species

White-tailed Kite (*Elanus leucurus*). **Federal Listing Status: None; State Listing Status: Fully Protected.** In California, white-tailed kites can be found in the Central Valley and along the coast, in grasslands, agricultural fields, cismontane woodlands, and other open habitats (Zeiner et al. 1990, Dunk 1995, Erichsen et al. 1996). White-tailed kites are year-round residents of the state, establishing nesting territories that encompass open areas with healthy prey populations, and snags, shrubs, trees, or other nesting substrates (Dunk 1995). Nonbreeding birds typically remain in the same area over the winter, although some movements do occur (Polite 1990). The presence of white-tailed kites is closely tied to the presence of prey species, particularly voles, and prey base may be the most important factor in determining habitat quality for white-tailed kites (Dunk and Cooper 1994, Skonieczny and Dunk 1997). Although the species recovered after population declines during the early 20th century, its populations may be exhibiting new declines because of recent increases in habitat loss and disturbance (Dunk 1995, Erichsen et al. 1996).

Large eucalyptus trees found in the developed/landscaped habitats in the northern portion of the study area provide potentially suitable nesting habitat for the white-tailed kite; however, no white-tailed kites were detected in the study area during the reconnaissance survey, nor were any raptor nests found in these trees during the reconnaissance survey. Nonetheless, white-tailed kites could potentially nest in the study area in the future, and may forage in the California annual grasslands found in the study area. At most, one nesting pair of this species would be present in the study area vicinity given this species' home range size.

5.2.3 California Species of Special Concern

Olive-sided Flycatcher (*Contopus cooperi*). **Federal status: None; State status: Species of Special Concern (Nesting).** Olive-sided flycatchers are often associated with coniferous forest habitats, and breed in mature forests with open canopies, along forest edges in more densely vegetated areas, in recently burned forest habitats, and in selectively harvested landscapes (Altman and Sallabanks 2000; Robertson and Hutto 2007). Olive-sided flycatchers nest in tall trees, building an open cup nest away from the main trunk in the middle to upper reaches of the tree (Widdowson 2008), and individuals exhibit high site fidelity. This species makes one of the longest annual migrations of any songbird, from the Andes Mountains of South America to boreal breeding grounds in the United States and Canada, arriving at their breeding territories beginning in mid-May and remaining until late July.

This species breeds widely in the Santa Cruz Mountains, and more sparingly in the Diablo Range, but it does not breed on the Santa Clara Valley floor. Likely, few pairs nest at sites below 1,000 feet in elevation, but confirmed breeding has occurred at elevations as low as 400 feet (Bousman 2007). The eucalyptus groves in the study area provide potentially suitable nesting habitat for this species. The species is known to nest in similar habitats in the vicinity (Bousman 2007) and is often detected in nearby parks during the nesting season, such

as at Stevens Creek County Park (Cornell Lab of Ornithology 2019). One pair of olive-sided flycatchers could potentially nest and forage in the study area, based on habitat availability and this species' home range size.

San Francisco Dusky-footed Woodrat (*Neotoma fuscipes annectens*). Federal status: None; State status: Species of Special Concern. The San Francisco dusky-footed woodrat occurs in a variety of woodland and scrub habitats throughout the South Bay and the adjacent Central Coast Range, south to the Pajaro River in Monterey County (Hall 1981, Zeiner et al. 1990). They prefer riparian and oak woodland forests with dense understory cover, or thick chaparral habitat (Lee and Tietje 2005). Dusky-footed woodrats build large, complex nests of sticks and other woody debris, which may be maintained by a series of occupants for several years (Carraway and Verts 1991). Woodrats also are very adept at making use of human-made structures, and can nest in electrical boxes, pipes, wooden pallets, and even portable storage containers. Woodrat nest densities increase with canopy density and with the presence of poison oak (Carraway and Verts 1991). Although the San Francisco dusky-footed woodrat is described as a generalist omnivore, individuals may specialize on local plants that are available for forage (Haynie et al. 2007). The breeding season for dusky-footed woodrat begins in February and sometimes continues through September, with females bearing a single brood of one to four young per year (Carraway and Verts 1991).

Woodlands and scrub habitats in the study area provide suitable nesting and foraging habitat for this species, and this species can be abundant in suitable habitat; although a focused survey for woodrat nests was not conducted, numerous woodrat nests were observed in the study area during the reconnaissance survey.

5.3 Sensitive Natural Communities, Habitats, and Vegetation Alliances

Natural communities have been considered part of the Natural Heritage Conservation triad, along with plants and animals of conservation significance, since the state inception of the Natural Heritage Program in 1979. The CDFW determines the level of rarity and imperilment of vegetation types, and tracks sensitive communities in its Rarefind database (CNDDDB 2019). Global rankings (G) of natural communities reflect the overall condition (rarity and endangerment) of a habitat throughout its range, whereas state (S) rankings are a reflection of the condition of a habitat within California. Natural communities are defined using NatureServe's standard heritage program methodology as follows (Faber-Langendoen et al. 2012):

G1/S1:	Critically imperiled
G2/S2:	Imperiled
G3/S3:	Vulnerable.
G4/S4:	Apparently secure
G5/S4:	Secure

In addition to tracking sensitive natural communities, the CDFW also ranks vegetation alliances, defined by repeating patterns of plants across a landscape that reflect climate, soil, water, disturbance, and other environmental factors (Sawyer et al. 2009). If an alliance is marked G1-G3, all of the vegetation associations within it will also be of high priority (CDFW 2019). The CDFW provides the Vegetation Classification and Mapping Program's (VegCAMP) currently accepted list of vegetation alliances and associations (CDFW 2019).

Impacts on CDFW sensitive natural communities, vegetation alliances/associations, or any such community identified in local or regional plans, policies, and regulations, must be considered and evaluated under CEQA (Title 14, Division 6, Chapter 3, Appendix G of the California Code of Regulations). Furthermore, aquatic, wetland and riparian habitats are also protected under applicable federal, state, or local regulations, and are generally subject to regulation, protection, or consideration by the USACE, RWQCB, CDFW, and/or the USFWS.

Sensitive Natural Communities. A query of sensitive habitats in Rarefind (CNDDDB 2019) identified four sensitive habitats as occurring within the nine USGS quadrangles containing or surrounding the study area: northern interior cypress forest (Rank G2/S2.2), serpentine bunchgrass (Rank G2/S2.2), valley oak woodland (G3/S2.1), and northern coastal salt marsh (Rank G3/S3.2). None of these sensitive natural communities occur within the Project study area.

Sensitive Vegetation Alliances. CDFW Sensitive alliances are not present on the Project site.

Sensitive Habitats (Waters of the U.S./State). A roadside ditch at the base of the abandoned gravel quarry contains some narrow bands of cattail (*Typha latifolia*) and recruiting arroyo willow (*Salix lasiolepis*), two species which are commonly associated with wetlands, and as such at least portions of this ditch have the potential to be considered waters of the U.S. and/or state. As discussed in Section 3.1.1 above, the USACE may claim this feature as jurisdictional waters of the U.S. under current regulations, as although this is an excavated feature, it has not been maintained and wetlands have been allowed to develop. Similarly, the RWQCB would likely consider the wetlands to be waters of the State. As waters of the State, and potential waters of the U.S., this wetland would be considered a sensitive habitat for CEQA assessment purposes. This wetland is not associated with a stream and would therefore not constitute sensitive riparian habitat claimed by CDFW.

5.4 Nonnative and Invasive Species

Several nonnative, invasive plant species occur in the study area in the California annual grassland habitat. Of these, pampas grass, yellow star thistle (*Centaurea solstitialis*), French broom (*Genista monspessulana*), and Himalyan blackberry (*Rubus armeniacus*) are rated as high threats by the Cal-IPC and have the potential to cause the most severe ecological impacts. Pampas grass is a widespread, invasive perennial bunchgrass that is spread by the wind and is well-established in areas of disturbance throughout the Bay Area. Pampas grass is abundant in the abandoned gravel quarry area and within the drainage ditch at the base of the quarry. Yellow starthistle is often spread by recreation and vehicles, and often colonizes disturbed roadsides and fields. Large patches of yellow

star thistle were found throughout the grassland habitat in the western portion of the study area, as well as along the dirt roads found throughout the property. This species can invade and degrade the remaining grassland habitat, as well as the higher quality chaparral and northern coastal scrub habitat. Himalayan blackberry is a strong competitor, often found in the understory of woodlands, and has potential to displace native plant species and thickets to produce a dense canopy which limits the growth of understory plants (Cal-IPC 2019). French broom was primarily found in the north coast scrub habitat in the northeastern portion of the study area. French broom dominates this habitat and has potential to have a negative environmental impacts by forming dense stands that exclude native plants and wildlife. Pampas grass, Yellow star thistle, French broom and Himalayan blackberry are all regionally common in the vicinity of the Project study area.

Section 6. Impacts and Mitigation Measures

The State CEQA Guidelines provide direction for evaluating the impacts of Projects on biological resources and determining which impacts will be significant. CEQA defines a “significant effect on the environment” as “a substantial adverse change in the physical conditions which exist in the area affected by the proposed Project.” Under State CEQA Guidelines Section 15065, a Project's impacts on biological resources are deemed significant if the Project would:

- A. “substantially reduce the habitat of a fish or wildlife species”
- B. “cause a fish or wildlife population to drop below self-sustaining levels”
- C. “threaten to eliminate a plant or animal community”
- D. “reduce the number or restrict the range of a rare or endangered plant or animal”

In addition to the Section 15065 criteria that trigger mandatory findings of significance, Appendix G of State CEQA Guidelines provides a checklist of other potential impacts to consider when analyzing the significance of Project effects. The impacts listed in Appendix G may or may not be significant, depending on the level of the impact. For biological resources, these impacts include whether the Project would:

- A. “have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service”
- B. “have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service”
- C. “have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act”
- D. “interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites”
- E. “conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance”
- F. “conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan”

6.1 Impacts on Special-Status Species: Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the CDFW or USFWS (Less than Significant with Mitigation)

6.1.1 Impacts on Special-Status Plants (Less than Significant with Mitigation)

Six plant species, Anderson's manzanita (CRPR 1B.2), King's Mountain manzanita (CRPR 1B.2), Brewer's calandrinia (CRPR 4.2), Santa Clara red ribbons (CRPR 4.3), western leatherwood (CRPR 1B.2) and arcuate bush mallow (CRPR 1B.2) have the potential to occur within the coast live oak, northern coastal scrub, and chamise chaparral habitats in the study area (Section 5.1, Appendix B). If any of these species is present, Project development may affect special-status plants due to disturbance of individuals within the populations and disturbance or destruction of suitable habitat. Direct impacts could include grading or filling areas supporting these species, trampling or crushing of plants, and soil compaction. Indirect impacts could include increased mobilization of dust onto plants, which can affect their photosynthesis and respiration. Ultimately, Project activities could result in the loss of individual plants, and possibly entire populations.

Brewer's calandrinia and Santa Clara red ribbons are two CRPR 4 plant species that have potential to occur within the Project study area. These two species have threat rankings of 0.2 and 0.3, respectively, indicating that they are "moderately" and/or "not very" threatened in California. Both of these species have a fairly wide distribution. Brewer's calandrinia occurs in the Coast Ranges from Lake County to San Diego County as well as in the central Sierra Nevada foothills. Santa Clara red ribbons has a more restricted range, being known from the San Francisco Bay area, but where it is found, populations tend to be quite large. The anticipated level of disturbance to populations of these two CRPR 4 species (if present) from the construction would result in minimal impacts locally. Potential development within the Project study area, such a construction of a hotel, is likely to occur in previously disturbed areas, though potentially, such development could occur anywhere in the study area. Because of the widespread distribution of CRPR 4 species (i.e., they are not particularly rare) and the limited extent of suitable habitat and limited potential impact area, potential impacts on these two species do not rise to the level of a significant impact. Each of these plants has relatively wide distributions in this part of the state, and any losses resulting from implementation of the proposed improvements would represent a very small percentage of these species' regional populations. Thus, impacts on or loss of small populations of these species would not be expected to substantially affect the species persistence or substantially reduce the number or restrict the range of these species. Therefore, Project implementation would not result in significant impacts on Santa Clara red ribbons and/or Brewer's calandrinia, and no mitigation for impacts to these species is warranted.

Conservation of CRPR 1 and 2 species is important because their populations contribute to preserving the genetic resources for the species and ensuring persistence of rare species in the County and state. If these species are present and impacts occur to 10% or less of their population (by individuals or occupied area) within the study area, the level of impact would be low enough to avoid potential extirpation of such a population, as

long as the remaining plants were avoided and protected. However, due to the regional rarity of these species, impacts to more than 10% of a population could contribute to a reduction in these species' range or genetic resources, which would be considered significant under CEQA. For the four CRPR 1 and 2 species with potential to occur—Anderson's manzanita, King's Mountain manzanita, western leatherwood, and arcuate bush mallow—extirpation of any population located within the study area could negatively impact the species' genetic resources, and could potentially represent a reduction in range. Implementation of the following mitigation measures will reduce impacts on special-status plants to a less-than-significant level.

Mitigation Measure 1. Pre-Activity Surveys for Special-Status Plants. Prior to initial ground disturbance and during the appropriate blooming period (Anderson's manzanita, November to May; King's Mountain manzanita, January to April; western leatherwood, January to April; arcuate bush mallow, April to September), a focused survey for these four potentially occurring special-status plant species will be conducted within chaparral, northern coastal scrub, and coast live oak woodland habitat in portions of the Project study area that would overlap with any Project footprint, as well as a 50-foot buffer around that Project footprint. This buffer may be increased by the qualified plant ecologist depending on site-specific conditions and activities planned in the areas, but must be at least 50 feet wide. Situations for which a greater buffer may be required include proximity to proposed activities expected to generate large volumes of dust, such as grading; potential for Project activities to alter hydrology supporting the habitat for the species in question; or proximity to proposed structures that may shade areas farther than 50 feet away. Surveys are to be conducted in a year with near-average or above-average precipitation. The purpose of the survey will be to assess the presence (and locations) or absence of the potentially occurring species. If none of the target species are found in the impact area or the identified buffer, then no further mitigation will be warranted. If Anderson's manzanita, King's Mountain manzanita, western leatherwood, or arcuate bush mallow individuals are found in the impact area or identified, then Mitigation Measures 2 and 3 will be implemented.

Mitigation Measure 2. Avoidance Buffers. To the extent feasible, and in consultation with a qualified plant ecologist, the Project proponent will design and construct the Project to avoid impacts on all individuals of, and occupied habitat for, special-status plant species within the Project site or within the identified buffer of the impact area. Avoided special-status plant populations will be protected by establishing and observing the buffer identified by the qualified plant ecologist between plant populations and the impact area. All such populations located in the impact area or the identified buffer, and their associated designated avoidance areas, will be clearly depicted on any construction plans. In addition, prior to initial ground disturbance or vegetation removal, the limits of the identified buffer around special-status plants to be avoided will be flagged or fenced. The flagging will be maintained intact and in good condition throughout Project-related construction activities.

If complete avoidance is not feasible and more than 10% of a population (by occupied area or individuals) would be impacted as determined by a qualified plant ecologist, Mitigation Measure 3 will be implemented.

Mitigation Measure 3. Preserve Off-Site Populations of Special-Status Plant Species. If avoidance of CRPR 1 or 2 special-status plant species is not feasible and more than 10% of the population would be impacted, compensatory mitigation will be provided via the preservation, enhancement, and management of occupied habitat for the affected species. To compensate for impacts on CRPR 1 or 2 special-status plants, off-site habitat occupied by the affected species will be preserved and managed in perpetuity at a minimum 1:1 mitigation ratio (at least one plant preserved for each plant affected, and at least one occupied acre preserved for each occupied acre affected), for any impact over the 10% significance threshold.

Areas proposed to be preserved as compensatory mitigation for special-status plant impacts must contain verified extant populations of the CRPR-ranked plants that would be impacted. Mitigation areas will be managed in perpetuity to encourage persistence and even expansion of the preserved target species. Mitigation lands cannot be located on land that is currently held publicly for resource protection unless substantial enhancement of habitat quality will be achieved by the mitigation activities. The mitigation habitat will be of equal or greater habitat quality compared to the impacted areas, as determined by a qualified plant ecologist, in terms of soil features, extent of disturbance, vegetation structure, and dominant species composition, and will contain at least as many individuals of the species as are impacted by Project activities. The permanent protection and management of mitigation lands will be ensured through an appropriate mechanism, such as a conservation easement or fee title purchase. A habitat mitigation and monitoring plan (HMMP) will be developed and implemented for the mitigation lands. That plan will include, at a minimum, the following information:

- a summary of habitat impacts and the proposed mitigation;
- a description of the location and boundaries of the mitigation site and description of existing site conditions;
- a description of measures to be undertaken to enhance (e.g., through focused management that may include removal of invasive species in adjacent suitable but currently unoccupied habitat) the mitigation site for the focal special-status species;
- a description of measures to transplant individual plants or seeds from the impact area to the mitigation site, if appropriate (which will be determined by a qualified plant or restoration ecologist);
- proposed management activities to maintain high-quality habitat conditions for the focal species;
- a description of habitat and species monitoring measures on the mitigation site, including specific, objective final and performance criteria, monitoring methods, data analysis, reporting requirements, monitoring schedule, etc. At a minimum, performance criteria will include demonstration that any plant population fluctuations over the monitoring period do not indicate a downward trajectory in terms of reduction in numbers and/or occupied area for the preserved mitigation population that can be attributed to management (i.e., that are not the result of local weather patterns, as determined by monitoring of a nearby reference population, or other factors unrelated to management); and
- contingency measures for mitigation elements that do not meet performance criteria.

The HMMP will be prepared by a qualified plant or restoration ecologist. Approval of the HMMP by the City of Saratoga will be required before the Project impact occurs.

6.1.2 Impacts on the White-tailed Kite and the Olive-sided Flycatcher (Less than Significant)

Both the white-tailed kite (a California fully protected species) and the olive-sided flycatcher (a California species of special concern when nesting) may nest in trees within and adjacent to the study area, and both species may forage in the study area. Heavy ground disturbance, noise, and vibrations caused by Project development activities could potentially disturb foraging or roosting individual white-tailed kites or olive-sided flycatchers and cause them to move away from work areas. Project grading and tree removal may result in the removal of active nests or the disturbance of nests adjacent to the study area, possibly to the point of abandonment of active nests with eggs or nestlings.

Neither adult white-tailed kites nor adult olive-sided flycatchers are expected to be killed or injured due to Project activities because they could easily fly from the work site prior to such effects occurring. However, eggs or young in nests may be killed or injured as a result of destruction by construction personnel or equipment, or removal of vegetation containing nests. Further, nesting may be disrupted to the extent that nests would fail because of disturbance that was too frequent or too severe. In addition, Project activities causing a substantial increase in noise, movement of equipment, or human presence may have a direct effect on the behavior of individuals causing them to avoid work sites and possibly exposing them to increased competition with other birds in the areas to which they disperse and increased levels of predation caused by unfamiliarity with the new area. These types of impacts are expected to occur primarily while construction or maintenance activities are ongoing. Increases in human concentration, including ongoing construction activities associated with hotel construction, and activity associated with increased human activities near suitable habitat also may result in an increase in native and nonnative predators that would be attracted to trash left in the work site.

However, based on our site observations, the areal extent of the study area, and known breeding densities of these two species, no more than one pair each of white-tailed kites and olive-sided flycatchers are expected to nest on or adjacent to the study area, if these species are present at all. Therefore, the loss of individuals potentially resulting from Project development would represent a very small fraction of the regional population of these species and would not rise to the CEQA standard of having a *substantial* adverse effect. Nevertheless, all native bird species, including the white-tailed kite and olive-sided flycatcher, are protected from direct take by federal and state statutes (see Impact 6.3 below).

6.1.3 Impacts on the San Francisco Dusky-footed Woodrat (Less than Significant with Mitigation)

The San Francisco dusky-footed woodrat (a California species of special concern) is known to occur throughout the study area, and several nests were documented throughout the Project site during the reconnaissance survey. Hotel construction and sewer connection activities may result in the injury or mortality of dusky-footed

woodrats because of equipment use and worker foot traffic, particularly when woodrats are taking refuge in their stick nests. Suitable habitat and nests may be directly lost as a result of clearing and grading for the proposed hotel, and any associated infrastructure. Project construction could potentially result in the loss of tens of nests, depending on how many nests are present.

Indirect impacts also could occur as a result of over-crowding (as individuals lost habitat and moved to areas that were already occupied) and increased risk of predation. As a result of the species' regional abundance and high reproductive capabilities, Project impacts on dusky-footed woodrats would not have a substantial effect on regional populations. However, woodrats are very important ecologically in that they provide an important prey source for raptors (particularly owls) and for predatory mammals, and their nests also provide habitat for a wide variety of small mammals, reptiles, and amphibians. As a result, the loss of large numbers of woodrats and their nests would be a significant impact. Implementation of Mitigation Measure 4, as described below, would reduce Project impacts on the San Francisco dusky-footed woodrat and its habitat to a less-than-significant level.

Mitigation Measure 4. Preconstruction Surveys and Avoidance or Nest Relocation. Prior to any clearing of, or work within, coast live oak woodland, northern coastal scrub, or chamise chaparral habitats, a qualified biologist will conduct a survey for San Francisco dusky-footed woodrat nests. If active nests are determined to be present within or very close to the impact areas, the following measures will be implemented.

- Dusky-footed woodrats are year-round residents. Therefore, avoidance measures are limited to restricting Project activities to avoid direct impacts on woodrats and their active nests to the extent feasible. Ideally, a minimum 10-foot buffer will be maintained between Project activities and each nest to avoid disturbance. In some situations, a smaller buffer may be allowed if, in the opinion of a qualified biologist, removing the nest would be a greater impact than that anticipated as a result of Project activities.
- If avoidance of active nests is not feasible, then the woodrats will be evicted from their nests prior to the removal of the nests and onset of any clearing or ground-disturbing activities to avoid injury or mortality of the woodrats. The nests will be dismantled and the nesting material moved to a new location outside the Project's impact areas so that it can be used by woodrats to construct new nests. Prior to nest deconstruction, each active nest will be disturbed by a qualified wildlife biologist to the degree that all woodrats leave the nest and seek refuge out of the impact area. Whether the nest is on the ground or in a tree, the nest will be nudged to cause the woodrats to flee. The nest will then be dismantled and the nest material piled at the base of a nearby hardwood tree or shrub (preferably with refuge sites among the tree roots or with dense vegetation or other refugia nearby) outside of the impact area. The spacing between relocated nests will not be less than 100 foot, unless a qualified biologist has determined that the habitat can support higher densities of nests.

Implementation of Mitigation Measure 4 would be adequate to assure that impacts on dusky-footed woodrats and their habitat would be less than significant. Because the species' habitats are relatively widespread, impacts on its habitat would not require additional species-specific mitigation.

6.1.4 Impacts on the California Red-legged Frog (Less than Significant with Mitigation)

Although suitable breeding habitat for the California red-legged frog (pools with emergent vegetation) is not present in the study area, there is a 2007 breeding record from Calabazas Creek, 0.54 mile from the study area, as well as a recent record from Saratoga Creek, approximately 0.91 mile from the study area (CNDDB 2019). Moreover, potentially suitable breeding habitat for the California red-legged frog has been identified in Quarry Park, approximately 0.7 mile from the study area (i.e., within dispersal distance) (City of Saratoga 2014). Thus, although red-legged frogs are not expected to breed in the study area, non-breeding individuals may still disperse through the study area, albeit infrequently and in low numbers. If the species occurs, it is most likely to occur during the wet season, due to the arid conditions surrounding the site.

Project activities would not result in the loss of breeding or foraging habitat for the California red-legged frog, because no suitable breeding or foraging habitat exists in the study area. Ostensibly suitable dispersal habitat may be permanently lost; however, because such habitat represents low-quality, low-use habitat (due to the arid conditions dominating the site), and because the Project site does not lie between two high-use areas (such as two large breeding populations), the loss of habitat over which red-legged frogs may occasionally disperse would not be considered a significant impact. Similarly, the footprint of the hotel would occupy only a relatively small proportion of the study area, so it would not impede the ability of red-legged frogs to occasionally move through the study area.

Although individuals are expected to occur in the study area only on an occasional basis, if it all, if individuals are present during hotel construction activities, grading, excavation, and ground disturbance associated with construction of the hotel, could result in injury or mortality of individuals. This would represent a significant impact due to the species' regional rarity. Seasonal movements may be temporarily and locally affected during construction activities because of disturbance, and substrate vibrations may cause individuals to move out of refugia, exposing them to a greater risk of predation or desiccation. In addition, petrochemicals, hydraulic fluids, and solvents that are spilled or leaked from construction vehicles or equipment may kill individuals. Further, increases in human concentration and activity in the vicinity of potentially suitable dispersal habitat may result in an increase in native and nonnative predators that would be attracted to trash left at the work site and that would prey opportunistically on individuals of this species. Implementation of Mitigation Measures 5–7 would reduce Project impacts on the California red-legged frog to a less-than-significant level.

Mitigation Measure 5. Worker Environmental Awareness Program. Before any construction activities begin, the Mountain Winery will hire a qualified biologist who will conduct a training session for all construction personnel. At a minimum, the training will include descriptions of all special-status species potentially occurring on the Project site and their habitats, the importance of these species, the general measures that are being

implemented to conserve them as they relate to the proposed Project, and the boundaries within which Project activities may be accomplished.

Mitigation Measure 6. Avoidance. Because dusk and dawn are often the times when the red-legged frog is most actively moving and foraging, to the maximum extent practicable, earthmoving and other Project activities will cease no less than 30 minutes before sunset and will not begin again prior to 30 minutes after sunrise. Further, to the extent practicable, ground-disturbing activities will be avoided from October 15 through April 15 because that is when red-legged frogs are most likely to be moving through upland areas. When ground-disturbing activities must take place between October 15 and April 15, Mitigation Measure 7 will be implemented.

Mitigation Measure 7. Pre-activity Survey and Monitoring. If work activities occur between October 15 and April 15, a qualified biologist will conduct a preconstruction survey for the California red-legged frog prior to initial ground disturbing activities and will remain on-site to monitor during all initial ground-disturbing activities within this area. If a California red-legged frog is encountered in the work area, all activities with the potential to result in the harassment, injury, or death of the individual will be immediately halted and will not resume until the individual leaves the Project site of its own accord. After initial clearing and grubbing are completed, biological monitoring is no longer necessary. However, if any member of the construction crew observes an animal that may be a California red-legged frog, all work that could affect the frog will stop; a qualified biologist will be contacted; and the qualified biologist will determine whether the animal is a red-legged frog and what next steps are appropriate. The animal will not be physically handled without approval from the U.S. Fish and Wildlife Service.

6.2 Impacts on Sensitive Communities: Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service

6.2.1 Impacts on Riparian Habitat or Other Sensitive Natural Communities (No Impact)

Riparian habitats are unique areas that surround river and stream banks and contribute disproportionately high habitat values and functions for their limited surface area. Specially-adapted plants that may tolerate repeated flooding or that rely on a high water table often occur in these areas, but even when it supports primarily upland species, this vegetation is important for stabilizing the banks, reducing soil erosion, and maintaining water quality within the stream channel, and the amount and type of vegetation present can have effects on water temperature and therefore aquatic habitat within the stream. Riparian corridor vegetation also provides specialized habitat for wildlife, including shade, breeding areas, and food sources. Riparian habitats are uncommon within the larger landscape. Riparian areas are considered sensitive habitats by the CDFW and are regulated as such under Section 1600 of the California Fish and Game Code. No riparian habitats are present in the study area, and thus none will be directly impacted by the Project. Indirect impacts on potential water

quality in drainages outside the Project study area (as well as any associated riparian habitat) will be avoided as described under *Impacts on Wetlands and Water Quality* below.

6.2.2 Direct Impacts on Wetlands (Less than Significant with Mitigation)

Wetlands and other waters provide substantial habitat value for wildlife, providing foraging and dispersal opportunities for aquatic-dependent species. Additionally, these habitats are considered sensitive by regulatory agencies.

Portions of a roadside ditch at the base of the abandoned quarry have potential to be considered a wetland because wetland plant species (e.g., cattails and willow scrub) are present, and wetland hydrology may be present in the form of a ditch holding water for some period of the year. This feature has potential to be impacted, either temporarily or permanently, during Project grading for the installation of a sewer line in this area and/or road improvements associated with the sewer line. Even if the ditch is not permanently impacted, temporary impacts to the wetlands within the ditch may occur due to construction access, potentially resulting in removal of wetland vegetation or temporary disruption of hydrology. Owing to the general scarcity of wetlands in the Bay Area, this impact would be significant. Implementation of Mitigation Measures 8, 9, and 10 will reduce this impact to a less-than-significant level.

Mitigation Measure 8. Avoidance and Minimization. To the extent feasible, construction activities should avoid or minimize the removal of wetland vegetation within this ditch or the placement of fill in the ditch. The ditch will be clearly depicted on construction plan sets and areas to be avoided will be shown as outside the allowable work area. If all direct impacts to the ditch (i.e., vegetation removal and fill) are avoided, Mitigation Measures 9 and 10 do not need to be implemented, but if any wetland vegetation needs to be removed from the wetland, or any fill needs to be placed in the ditch, Measure 9 (and Measure 10, if permanent impacts will occur) will be implemented.

Mitigation Measure 9. In-Situ Restoration of Temporary Impacts. If impacts to the ditch, and/or the portions of the ditch containing wetlands, are temporary and permanent fill of the ditch is not necessary, then the ditch will be restored following construction. Following installation of the sewer line, the ditch will be restored to its original contours and erosion control measures installed to prevent indirect impacts on wetland vegetation elsewhere in the ditch. If impacts to wetlands in the ditch are temporary, such as from the mowing of vegetation for access or staging for equipment, then an in-situ restoration approach could involve salvage of wetland plant material prior to construction (e.g. willow cuttings and/or salvage of willow clumps) and then replanting those clumps if the seasonal timing of the construction were appropriate. A native seed mix will be used in areas without appropriate hydrology to support willow cuttings to stabilize any disturbed ground surface in the ditch. The mitigation from in-situ restoration should, at a minimum, restore the impacted wetland area at a minimum 1:1 ratio, on an acreage basis, with a goal to provide ecological functions and values within the restored area that are at least as great as baseline conditions. USACE and/or RWQCB approvals may be required to authorize temporary impacts to the ditch.

Mitigation Measure 10. Compensatory Mitigation. If any permanent fill of the wetlands in the ditch will occur, the Project proponent will provide new wetland habitat to offset this impact, either through the creation of new wetlands in an appropriate location or via the purchase of credits in a USACE/RWQCB-approved wetland mitigation bank. If Project-specific creation of wetland habitat is implemented, habitat will be restored or created at a minimum ratio of 2:1 (compensation: impact) on an acreage basis. This ratio is not higher due to the relatively low quality of the wetlands in the study area relative to more extensive, less fragmented wetlands elsewhere in the region, but it is not lower due to the temporal loss of wetland functions and values that would result from the lag between impacts to the wetlands and maturation of the mitigation habitat. USACE and/or RWQCB approvals may be required to authorize permanent impacts to this feature.

Compensation will be provided by creating or restoring wetland habitat so as to achieve the 2:1 ratio somewhere in Santa Clara County. A qualified biologist shall develop a Wetland Mitigation and Monitoring Plan describing the mitigation, which will contain the following components (or as otherwise modified by regulatory agency permitting conditions):

- Summary of habitat impacts and proposed mitigation ratios
- Goal of the restoration to achieve no net loss of habitat functions and values
- Location of mitigation site(s) and description of existing site conditions
- Mitigation design:
 - Existing and proposed site hydrology
 - Grading plan if appropriate, including bank stabilization or other site stabilization features
 - Soil amendments and other site preparation elements as appropriate
 - Planting plan
 - Irrigation and maintenance plan
 - Remedial measures and adaptive management
- Monitoring plan (including final and performance criteria, monitoring methods, data analysis, reporting requirements, and monitoring schedule). Success criteria will include quantifiable measurements of wetland vegetation type (e.g., dominance by natives) and extent appropriate for the restoration location, and provision of ecological functions and values equal to or exceeding those in the wetland habitat affected. At a minimum, success criteria will include following:
 - At Year 5 post-mitigation, at least 75 percent of the mitigation site will be dominated by native hydrophytic vegetation.

The Wetland Mitigation and Monitoring Plan must be approved by the City of Saratoga prior to the wetland impacts, and it must be implemented within one year following impact.

Alternately, off-site mitigation could be provided via the purchase of mitigation credits at an agency-approved mitigation bank such as the San Francisco Wetland Mitigation Bank.

6.2.1 Indirect Impacts on Wetlands and Water Quality (Less than Significant)

Development of areas in the northeastern portion of the study area could have indirect impact on the water quality in the drainages that occur just outside of the study area in intermittent drainages that have their headwaters just downslope of the study area. Development of these areas could negatively impact water quality from construction-related erosion or changes to stormwater patterns. In order to eliminate indirect impacts on sensitive creek habitat outside the Project study area, any disturbance or construction should be designed to avoid any potential impacts to downslope jurisdictional other waters habitat. Construction Projects in California causing land disturbances that are equal to 1 acre or greater must comply with State requirements to control the discharge of stormwater pollutants under the NPDES *General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities* (Construction General Permit; Water Board Order No. 2009-0009-DWQ). Prior to the start of construction/demolition, a Notice of Intent must be filed with the State Water Board describing the Project. A Storm Water Pollution Prevention Plan (SWPPP) must be developed and maintained during the Project and it must include the use of Best Management Practices (BMPs) to protect water quality until the site is stabilized. Standard permit conditions under the Construction General Permit require that the applicant utilize various measures including: on-site sediment control best management practices, damp street sweeping, temporary cover of disturbed land surfaces to control erosion during construction, and utilization of stabilized construction entrances and/or wash racks, among other factors.

Finally, in many Bay Area counties, including San Mateo County, Projects must also comply with the *California Regional Water Quality Control Board, San Francisco Bay Region, Municipal Regional Stormwater NPDES Permit* (MRP) (Water Board Order No. R2-2015-0049). This MRP requires that all Projects implement BMPs and incorporate Low Impact Development practices into the design to prevent stormwater runoff pollution, promote infiltration, and hold/slow down the volume of water coming from a site after construction has been completed. In order to meet these permit and policy requirements, Projects must incorporate the use of green roofs, impervious surfaces, tree planters, grassy swales, bioretention and/or detention basins, among other factors. These same features will be used to treat any stormwater that flows to the off-site brackish marsh during large storm events.

Compliance with state requirements to control the discharge of stormwater pollutants during construction under the NPDES Construction General Permit and the RWQCB required SWPPP, and post-construction measures and design features required by the MRP would reduce the Project's potential impact on water quality to a less-than-significant level.

6.2.2 Impacts Caused by Nonnative and Invasive Species (Less than Significant with Mitigation)

Several nonnative, invasive plant species occur in the ruderal California annual grassland, northern coastal scrub, and coast live oak woodland throughout the study area. Invasive species can spread quickly and can be difficult to eradicate. Many nonnative, invasive plant species produce seeds that germinate readily following disturbance. Further, disturbed areas are highly susceptible to colonization by nonnative, invasive species that occur locally, or whose propagules are transported by personnel, vehicles, and other equipment. Activities such as trampling, equipment staging, and vegetation removal are all factors that would contribute to disturbance. Areas of disturbance could serve as the source for promoting the spread of nonnative species, which could degrade the ecological values of wetland habitat and adversely affect native plants and wildlife that occur there. Invasive species can have an adverse effect on native species and habitats in several ways, including by altering nutrient cycles, fire frequency and/or intensity, and hydrologic cycles; by creating changes in sediment deposition and erosion; by dominating habitats and displacing native species; by hybridizing with native species; and by promoting nonnative animal species (Bossard et al. 2000). The study area contains invasive species rated by Cal-IPC as highly invasive, including pampas grass, French broom, yellow star thistle, and Himalayan blackberry. These species are located along the dirt roads throughout the property and throughout the abandoned gravel quarry area, where Project activities could cause them to spread.

Future development Projects to be undertaken in the northern portion of the study area have the potential to result in large portions of the site being subject to soil disturbance (e.g. for the development of a hotel in the northern portion of the study area). The installation of a sewer line in the vicinity of the abandoned gravel quarry and/or improvements to the access road associated with this line, similarly have the potential to result in additional soil disturbance in an area that already has invasive species (e.g. pampas grass). Activities such as vegetation removal, grading, and equipment staging are all factors that would contribute to disturbance. Areas of disturbance could serve as the source for promoting the spread of nonnative species, which could degrade the ecological values of native habitats that occur immediately adjacent to the Project study area, and adversely affect native plants and wildlife that occur there. Given the relatively high quality of the coast live oak woodland, northern coastal scrub, and chamise chaparral habitats on the site, increasing the risk or extent of invasion by nonnative plants would be a significant impact.

Because grading and vegetation removal disturbance would occur within an area that is already disturbed, and that pampas grass, French broom, yellow star thistle, and Himalayan blackberry are already widespread regionally, it is unlikely that this disturbance would result in a substantially increased source population for the spread of nonnative, invasive species into adjacent native habitat areas. Nevertheless, implementation of the following mitigation measure will further prevent the spread of nonnative, invasive species into adjacent native habitat areas and reduce this potential impact to a less-than significant level.

Measure 11. Reseeding of Disturbed Areas. All disturbed upland soils will be stabilized and planted with a native seed mix from seed sourced from local genotypes following construction. All straw used as erosion control materials for the project will be certified weed-free. The removed vegetation, which may include

invasive plant species, will be collected and completely removed from the Project site. This material will be disposed of in a legally operating landfill so that propagules are not spread to other areas. All equipment used to remove project vegetation will be washed prior to being used on another project site.

6.3 Impacts on Wildlife Movement: 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 (Less than Significant)

For many species, the landscape is a mosaic of suitable and unsuitable habitat types. Environmental corridors are segments of land that provide a link between these different habitats while also providing cover. Development that fragments natural habitats (i.e., breaks them into smaller, disjunct pieces) can have a twofold impact on wildlife: first, as habitat patches become smaller they are unable to support as many individuals (patch size); and second, the area between habitat patches may be unsuitable for wildlife species to traverse (connectivity).

The study area is located in a mixture of habitats, including developed/landscaped, California annual grassland, northern coastal scrub, chamise chaparral, and irrigated vineyards. Although construction of the proposed hotel would convert a relatively small area of the study area from existing natural communities to developed/landscaped, it would result in negligible loss of habitat relative to the study area as a whole, and animals would continue to be able to move through the study areas after it is completed.

Noise and disturbance associated with hotel construction could cause species that commonly use habitats within the study area for dispersal to temporarily avoid moving through the site. The loudest noise would be associated with construction and temporary maintenance activities, and once such activities are complete, wildlife use of the surrounding areas would be similar to existing conditions. Construction of the hotel may inhibit movement of some more sensitive wildlife species, such as mountain lions, through the site, as this species can be particularly sensitive to human activity. However, ample opportunity exists for movement by this species in the vicinity of the Project site, and while dispersal or habitat use by this species may be limited by the introduction of increased human activity due to operation of the hotel, impacts on regional mountain lion populations or movements are not expected to be substantial. Thus, the proposed Project would not interfere substantially with the movement of any native resident or migratory wildlife species or with established native resident or migratory wildlife corridors and this impact would be less than significant.

Disturbance related to construction activities and operation of the hotel during the bird breeding season (February 1 through August 31, for most species) could result in the incidental loss of eggs or nestlings, either directly through the destruction or disturbance of active nests or indirectly by causing the abandonment of nests located near areas used by hotel visitors. However, the habitats in the study area represent a very small proportion of the habitats that support these species regionally. In addition, all species of birds currently using the study area are expected to continue to nest and forage on the site after Project construction is completed because no substantial loss of existing natural communities would occur. Therefore, Project impacts on

common nesting and foraging birds due to disturbance would not rise to the CEQA standard of having a *substantial* adverse effect, and these impacts would not constitute a significant impact on these species or their habitats under CEQA. However, all native bird species are protected from direct take by federal and state statutes (see Sections 3.1.5 and 3.2.4). Therefore, we recommend that the following measures be implemented to ensure that Project activities comply with the MBTA and California Fish and Game Code:

Measure A. Avoidance. To the extent feasible, construction activities should be scheduled to avoid the nesting season. If construction activities are scheduled to take place outside the nesting season, all impacts on nesting birds protected under the MBTA and California Fish and Game Code would be avoided. The nesting season for most birds in the Project region extends from February 1 through August 31.

Measure B. Preconstruction Surveys. If it is not possible to schedule construction activities between September 1 and January 31 then preconstruction surveys for nesting birds should be conducted by a qualified ornithologist to ensure that no nests will be disturbed during Project construction. We recommend that these surveys be conducted no more than seven days prior to the initiation of construction activities. During this survey, the ornithologist should inspect all trees and other potential nesting habitats (e.g., trees, shrubs, ruderal grasslands, buildings) in and immediately adjacent to the impact areas for nests.

Measure C. Buffers. If an active nest is found sufficiently close to work areas to be disturbed by Project activities, the ornithologist should determine the extent of a construction-free buffer zone to be established around the nest (typically 300 feet for raptors and 100 feet for other species), to ensure that no nests of species protected by the MBTA and California Fish and Game Code would be disturbed during Project implementation.

Measure D. Inhibition of Nesting. If construction activities will not be initiated until after the start of the nesting season, all potential nesting substrates (e.g., bushes, trees, grasses, and other vegetation) that are scheduled to be removed by the Project may be removed prior to the start of the nesting season (e.g., prior to February 1). This will preclude the initiation of nests in this vegetation, and prevent the potential delay of the Project due to the presence of active nests in these substrates.

6.4 Impacts due to Conflicts with Local Policies: Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance (Less than Significant)

6.4.1 City of Saratoga Tree Ordinance (No Impact)

Per City of Saratoga Municipal Code Chapter 15, permission to remove protected trees may be granted as part of approval of other development permits. Any future Project activities would need to comply with City of Saratoga's tree ordinance, including obtaining a permit from the City to remove protected trees and paying any applicable fee. Therefore, by complying with the tree ordinance, impacts related to conflict with local policies or ordinances protecting trees would be less than significant.

6.4.2 City of Saratoga General Plan Open Space and Conservation Element Policies (No Impact)

The City of Saratoga's General Plan Open Space and Conservation Element (City of Saratoga 2007) includes several policies designed to protect biological resources. These policies are described below.

General Plan Policy Goal OSC 11, protect and enhance sensitive vegetative and wildlife habitat in the Saratoga Planning area, is regulated by General Plan Policies OSC 11.1, 11.2, and 11.3. General Policy OSC 11.1 specifies the minimization of development that would encroach into important wildlife habitats, limit or restrict normal range areas, or restrict access to water food or shelter. This includes limitations on the installation of barrier fencing in hillside areas. The proposed Project may result in hotel development within the study area, which contains no sensitive vegetative habitat. Although the study area provides suitable or potentially habitat for several special-status species, as discussed above the numbers of individuals of these species that may occur in the study area are limited at best for the white-tailed kite and olive-sided flycatcher, and any impacts on their habitat would not rise to the CEQA standard of significance, as described in section 6.1.2. The mitigation measures prescribed above in section 6.1.3 for the San Francisco dusky-footed woodrat, and in section 6.1.4 for the California red-legged frog, will reduce any impacts to a less than significant level.

General Plan Policy Goal OSC 11.2 specifies the preservation and protection of riparian habitats and creek corridors through the development and CEQA process. This includes requiring biological surveys of parcels of land that could contain sensitive species or their habitats prior to allowing development on these parcels. There is no impact because this policy is not applicable; there is no riparian habitat or creek corridors within the study area.

General Plan Policy Goal OSC 11.3 specifies that the design of parking lots shall be evaluated for opportunities to reduce large continuous expanses of asphalt and to promote the establishment of visually interesting and aesthetically pleasing parking lots.

Thus, provided that this Project successfully incorporates the mitigation measures described in this biological resources report, it will not conflict with City of Saratoga General Plan Open Space and Conservation Element Policies. This biological resources report represents compliance with these policies by providing all the information required by the mitigation measure for a biological resources assessment.

6.5 Impact due to Conflicts with an Adopted Habitat Conservation Plan: Conflict with the provisions of an adopted habitat conservation plan, natural community conservation plan, or other approved local, regional, or state habitat conservation plan (No Impact)

The study area is not located within an area covered by an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan. Therefore, the Project would not conflict with any such plans.

6.6 Cumulative Impacts

Cumulative impacts arise due to the linking of impacts from past, current, and reasonably foreseeable future Projects in the region. In Saratoga where the Project is located, such Projects include the Saratoga to Sanborn Trail Project, John Henry House Relocation, and a mixed use Project at 3rd Street and Big Basin Way. The 3rd Street Project site is located on a previously modified, predominantly paved parcel in downtown Saratoga. Thus, this Projects not expected to impact any of the special-status species potentially affected by the proposed Mountain Winery Annexation Projector to result in any direct impacts on wetlands or other sensitive habitats. Similarly, the proposed relocation of the John Henry House and construction of a mixed-use commercial/office building would occur at an already developed, urban location and is not expected to impact special-status species or sensitive habitats. Thus, the cumulative impact on biological resources resulting from the proposed Project in combination with these two Projects is not expected to be significant.

The Saratoga to Sanborn Trail Project has the potential to impact natural habitat similar to those on the proposed Project site. Thus, this Project, as well as any development that occurs in the future in similar habitats in this region, would result in potential impacts on many of the same types of biological resources that would be impacted by construction activities for the proposed Project. The cumulative impact on biological resources resulting from the proposed Project in combination with other Projects in the Project area and larger region would be dependent on the relative magnitude of adverse effects of these Project son biological resources compared to the relative benefit of impact avoidance and minimization efforts prescribed by planning documents, CEQA mitigation measures, and permit requirements for each Project; compensatory mitigation and proactive conservation measures associated with each Project. In the absence of such avoidance, minimization, compensatory mitigation, and conservation measures, cumulatively significant impacts on biological resources would occur.

However, the City of Saratoga General Plan contains conservation measures that would benefit biological resources, as well as measures to avoid, minimize, and mitigate impacts on these resources. Further, it is expected that most current and future Projects in the region, including the Projects listed above, will have to mitigate Project impacts through the CEQA, Fish and Game Code 1602, or Clean Water Act Section 404/401 permitting process, and possibly FESA and CESA consultation. As a result, these other Projects are expected to implement mitigation for substantial impacts on biological resources as is being required of the proposed Project. Thus, provided that this Project successfully incorporates the mitigation measures described in this biological resources report, the Project would not have a cumulatively considerable contribution to substantial cumulative impacts on biological resources.

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Appendix A. Plants Observed

Family	Scientific Name	Common Name
Anacardiaceae	<i>Toxicodendron diversilobum</i>	poison oak
Apiaceae	<i>Daucus carota</i>	wild carrot
Apocynaceae	<i>Nerium oleander</i>	common oleander
Asphodelaceae	<i>Phormium tenax</i>	New Zealand Flax
Asteraceae	<i>Achillea millefolium</i>	common yarrow
Asteraceae	<i>Artemisia californica</i>	California sagebrush
Asteraceae	<i>Baccharis pilularis</i>	coyote brush
Asteraceae	<i>Carduus pycnocephalus</i>	Italian thistle
Asteraceae	<i>Centaurea solstitialis</i>	yellow star thistle
Asteraceae	<i>Cirsium vulgare</i>	bull thistle
Asteraceae	<i>Crepis vesicaria</i> ssp. <i>taraxacifolia</i>	weedy hawk's beards
Asteraceae	<i>Dittrichia graveolens</i>	stink wort
Asteraceae	<i>Eriophyllum confertiflorum</i>	golden yarrow
Asteraceae	<i>Heterotheca grandiflora</i>	telegraph weed
Asteraceae	<i>Hypochaeris radicata</i>	hairy cat's ear
Asteraceae	<i>Pseudognaphalium californicum</i>	ladies' tobacco
Berberidaceae	<i>Berberis aquifolium</i>	holly leaved barberry
Boraginaceae	<i>Eriodictyon californicum</i>	yerba santa
Brassicaceae	<i>Brassica nigra</i>	black mustard
Brassicaceae	<i>Brassica</i> sp.	mustard sp.
Caprifoliaceae	<i>Lonicera hispidula</i>	pink honeysuckle
Caprifoliaceae	<i>Symphoricarpos albus</i>	common snowberry
Centaurium pulchellum	<i>Centaurium pulchellum</i>	branched centaury
Convolvulaceae	<i>Convolvulus arvensis</i>	field bindweed
Cupressaceae	<i>Sequoia sempervirens</i>	coast redwood
Dryopteridaceae	<i>Dryopteris arguta</i>	wood fern
Ericaceae	<i>Arbutus menziesii</i>	madrono
Ericaceae	<i>Arctostaphylos glauca</i>	big berry manzanita
Fabaceae	<i>Acmispon americanus</i>	American bird's foot trefoil
Fabaceae	<i>Cytisus scoparius</i>	Scotch broom
Fabaceae	<i>Genista monspessulana</i>	French broom
Fabaceae	<i>Trifolium hirtum</i>	rose clover
Fabaceae	<i>Trifolium</i> sp.	Clover sp.
Fagaceae	<i>Quercus agrifolia</i>	coast live oak
Fagaceae	<i>Quercus lobata</i>	valley oak
Iridaceae	<i>Dietes bicolor</i>	fortnight lily
Juglandaceae	<i>Juglans hindsii</i>	Northern California black walnut

Family	Scientific Name	Common Name
Lamiaceae	<i>Clinopodium douglasii</i>	yerba buena
Lamiaceae	<i>Salvia sp.</i>	sage sp.
Lauraceae	<i>Umbellularia californica</i>	bay laurel
Liliaceae	<i>Agapanthus sp.</i>	ornamental lilies sp.
Myrsinaceae	<i>Lysimachia arvensis</i>	scarlet pimpernel
Myrtaceae	<i>Eucalyptus globulus</i>	blue gum
Oleaceae	<i>Olea europaea</i>	olive trees
Orobanchaceae	<i>Castilleja foliolosa</i>	Woolly Indian paintbrush
Papaveraceae	<i>Eschscholzia californica</i>	California poppy
Papaveraceae	<i>Romneya coulteri</i>	Coulter's Matilija poppy
Phrymaceae	<i>Diplacus aurantiacus</i>	sticky monkeyflower
Pinaceae	<i>Pseudotsuga menziesii</i>	Douglas fir
Poaceae	<i>Avena fatua</i>	wild oats
Poaceae	<i>Bromus diandrus</i>	ripgut brome
Poaceae	<i>Cortaderia jubata</i>	pampas grass
Poaceae	<i>Cynosurus echinatus</i>	dog tail grass
Poaceae	<i>Festuca myuros</i>	rattail six weeks grass
Poaceae	<i>Festuca perennis</i>	Italian rye grass
Poaceae	<i>Hordeum murinum</i>	foxtail barley
Poaceae	<i>Polypogon monspeliensis</i>	rabbitsfoot grass
Polemoniaceae	<i>Navarretia squarrosa</i>	skunkbush
Polygonaceae	<i>Rumex sp.</i>	rumex sp.
Rhamnaceae	<i>Ceanothus sp.</i>	Ceanothus
Rhamnaceae	<i>Frangula californica</i>	California coffeeberry
Rosaceae	<i>Adenostoma fasciculatum</i>	chamise
Rosaceae	<i>Cercocarpus sp.</i>	mountain mahogany sp.
Rosaceae	<i>Heteromeles arbutifolia</i>	toyon
Rosaceae	<i>Rubus armeniacus</i>	Himalayan blackberry
Rosaceae	<i>Rubus ursinus</i>	California blackberry
Salicaceae	<i>Populus fremontii</i>	cottonwood
Salicaceae	<i>Salix laesilepis</i>	Arroyo willow
Sapindaceae	<i>Acer macrophyllum</i>	bigleaf maple
Sapindaceae	<i>Aesculus californica</i>	California buckeye
Scrophulariaceae	<i>Scrophularia californica</i>	California bee plant
Simaroubaceae	<i>Ailanthus altissima</i>	tree of heaven
Typhaceae	<i>Typha latifolia</i>	cattail
Vitaceae	<i>Vitis vinifera</i>	wine grapes

Appendix B. Special-Status Plants Considered for Potential Occurrence

Common Name	Scientific Name	Suitable Habitat Absent	Edaphic Conditions Absent	Outside Elevation Range	Extirpated from Project Vicinity
<i>Acanthomintha lanceolata</i>	Santa Clara thorn-mint	X	X		
<i>Acanthomintha duttonii</i>	San Mateo thorn-mint		X	X	
<i>Allium howellii</i> var. <i>howellii</i>	Howell's onion		X		
<i>Allium peninsulare</i> var. <i>franciscanum</i>	Franciscan onion	X			
<i>Amsinckia lunaris</i>	bent flowered fiddleneck	X			
<i>Androsace elongata</i> ssp. <i>acuta</i>	California androsace				
<i>Anomobryum julaceum</i>	slender silver moss	X	X		
<i>Arctostaphylos andersonii</i>	Anderson's manzanita				
<i>Arctostaphylos glutinosa</i>	Schreiber's manzanita		X		
<i>Arctostaphylos ohloneana</i>	Ohlone manzanita	X	X		
<i>Arctostaphylos regismontana</i>	Kings mountain manzanita				
<i>Arctostaphylos silvicola</i>	Bonny Doon manzanita		X		
<i>Astragalus tener</i> var. <i>tener</i>	alkali milk-vetch	X		X	
<i>Atriplex depressa</i>	brittlescale	X	X		
<i>Atriplex minuscula</i>	lesser saltscale	X	X	X	
<i>Azolla microphylla</i>	Mexican mosquito fern	X		X	
<i>Calandrinia breweri</i>	Brewer's calandrinia				

Common Name	Scientific Name	Suitable Habitat Absent	Edaphic Conditions Absent	Outside Elevation Range	Extirpated from Project Vicinity
<i>Calochortus umbellatus</i>	Oakland star-tulip	X	X		
<i>Calyptridium parryi</i> var. <i>hesseae</i>	Santa Cruz Mountains pussypaws	X			
<i>Calystegia collina</i> ssp. <i>venusta</i>	South Coast Range morning-glory		X		
<i>Centromadia parryi</i> ssp. <i>congdonii</i>	Congdon's tarplant		X	X	
<i>Chloropyron maritimum</i> ssp. <i>palustre</i>	Point Reyes bird's-beak	X		X	
<i>Chorizanthe pungens</i> var. <i>hartwegiana</i>	Ben Lomond spineflower	X	X		
<i>Chorizanthe robusta</i> var. <i>robusta</i>	robust spineflower		X	X	
<i>Cirsium fontinale</i> var. <i>campylon</i>	Mt. Hamilton fountain thistle		X		
<i>Cirsium fontinale</i> var. <i>fontinale</i>	Crystal Springs fountain thistle		X	X	
<i>Cirsium praeteriens</i>	lost thistle				X
<i>Clarkia breweri</i>	Brewer's clarkia		X		
<i>Clarkia concinna</i> ssp. <i>automixa</i>	Santa Clara red ribbons				
<i>Collinsia corymbosa</i>	round-headed Chinese- houses	X		X	
<i>Collinsia multicolor</i>	San Francisco collinsia	X		X	
<i>Cypripedium fasciculatum</i>	clustered lady's-slipper	X	X		
<i>Dirca occidentalis</i>	western leatherwood				
<i>Dudleya abramsii</i> ssp. <i>setchellii</i>	Santa Clara Valley dudleya		X		
<i>Eriastrum tracyi</i>	Tracy's eriastrum			X	
<i>Eriogonum argillosum</i>	clay buckwheat	X	X		
<i>Eriogonum nudum</i> var. <i>decurrans</i>	Ben Lomond buckwheat		X		

Common Name	Scientific Name	Suitable Habitat Absent	Edaphic Conditions Absent	Outside Elevation Range	Extirpated from Project Vicinity
<i>Eriophyllum jepsonii</i>	Jepson's woolly sunflower		X		
<i>Eriophyllum latilobum</i>	San Mateo woolly sunflower	X			
<i>Eryngium aristulatum</i> var. <i>hooveri</i>	Hoover's button-celery	X		X	
<i>Eryngium jepsonii</i>	Jepson's coyote-thistle	X			
<i>Erysimum franciscanum</i>	San Francisco Wallflower	X			
<i>Extriplex joaquinana</i>	San Joaquin spearscale	X	X		
<i>Fissidens pauperculus</i>	minute pocket moss	X			
<i>Fritillaria agrestis</i>	stinkbells	X			
<i>Fritillaria liliacea</i>	fragrant fritillary		X		
<i>Galium andrewsii</i> ssp. <i>gatense</i>	Phlox-leaf serpentine bedstraw		X		
<i>Grimmia torenii</i>	Toren's grimmia	X	X		
<i>Grimmia vaginulata</i>	vaginulate grimmia	X	X		
<i>Hesper-evax sparsiflora</i> var. <i>brevifolia</i>	short-leaved evax	X	X		
<i>Hesperocyparis abramsiana</i> var. <i>abramsiana</i>	Santa Cruz cypress		X		
<i>Hesperocyparis abramsiana</i> var. <i>butanoensis</i>	Butano Ridge cypress	X	X		
<i>Hesperolinon congestum</i>	Marin western flax		X		
<i>Hoita strobilina</i>	Loma Prieta hoita	X	X		
<i>Holocarpha macradenia</i>	Santa Cruz tarplant		X	X	
<i>Horkelia cuneata</i> var. <i>sericea</i>	Kellogg's horkelia	X	X		

Common Name	Scientific Name	Suitable Habitat Absent	Edaphic Conditions Absent	Outside Elevation Range	Extirpated from Project Vicinity
<i>Horkelia marinensis</i>	Point Reyes horkelia	X	X		
<i>Iris longipetala</i>	coast iris	X			
<i>Isocoma menziesii</i> var. <i>diabolica</i>	Satan's goldenbush	X			
<i>Lasthenia conjugens</i>	Contra Costa goldfields	X	X		
<i>Legenere limosa</i>	legenere	X	X		
<i>Leptosiphon acicularis</i>	bristly leptosiphon	X			
<i>Leptosiphon ambiguus</i>	serpentine leptosiphon		X		
<i>Leptosiphon grandiflorus</i>	large-flowered leptosiphon	X			
<i>Lessingia hololeuca</i>	woolly-headed lessingia		X		
<i>Lessingia micradenia</i> var. <i>glabrata</i>	smooth lessingia		X		
<i>Lessingia tenuis</i>	spring lessingia	X			
<i>Malacothamnus davidsonii</i>	Davidson's bush-mallow	X			
<i>Malacothamnus hallii</i>	Hall's bush mallow	X			
<i>Malacothrix phaeocarpa</i>	dusky-fruited malacothrix	X			
<i>Micropus amphibolus</i>	Mt. Diablo Cottonweed	X			
<i>Microseris sylvatica</i>	sylvan microseris		X		
<i>Mielichhoferia elongata</i>	elongate copper moss		X		
<i>Monardella antonina</i> ssp. <i>antonina</i>	San Antonio Hills monardella	X			
<i>Monolopia gracilens</i>	woodland woollythreads	X	X		
<i>Navarretia cotulifolia</i>	cotula navarretia	X	X		

Common Name	Scientific Name	Suitable Habitat Absent	Edaphic Conditions Absent	Outside Elevation Range	Extirpated from Project Vicinity
<i>Navarretia prostrata</i>	prostrate vernal pool navarretia	X	X		
<i>Orthotrichum kellmanii</i>	Kellman's bristle moss	X			
<i>Pedicularis dudleyi</i>	Dudley's lousewort	X			
<i>Penstemon rattanii</i> var. <i>kleei</i>	Santa Cruz Mountains beardtongue	X			
<i>Pentachaeta bellidiflora</i>	white-rayed pentachaeta	X	X		
<i>Perideridia gairdneri</i> ssp. <i>gairdneri</i>	Gairdner's yampah	X			
<i>Piperia candida</i>	white-flowered rein orchid	X			
<i>Piperia leptopetala</i>	narrow-petaled rein orchid	X			
<i>Plagiobothrys chorisianus</i> var. <i>chorisianus</i>	Choris' popcornflower	X			
<i>Plagiobothrys chorisianus</i> var. <i>hickmanii</i>	Hickman's popcornflower	X		X	
<i>Plagiobothrys glaber</i>	hairless popcorn flower	X	X	X	
<i>Psilocarphus brevissimus</i> var. <i>multiflorus</i>	Delta woolly-marbles	X			
<i>Puccinellia simplex</i>	California alkali grass	X			
<i>Sanicula saxatilis</i>	rock sanicle		X		
<i>Senecio aphanactis</i>	chaparral ragwort		X		
<i>Sidalcea malachroides</i>	maple-leaved checkerbloom	X			X
<i>Silene verecunda</i> ssp. <i>verecunda</i>	San Francisco campion	X	X		
<i>Stebbinsoseris decipiens</i>	Santa Cruz microseris	X			
<i>Streptanthus albidus</i> ssp. <i>albidus</i>	Metcalf Canyon jewelflower		X		

Common Name	Scientific Name	Suitable Habitat Absent	Edaphic Conditions Absent	Outside Elevation Range	Extirpated from Project Vicinity
<i>Streptanthus albidus</i> ssp. <i>peramoenus</i>	most beautiful jewelflower		X		
<i>Stuckenia filiformis</i> ssp. <i>alpina</i>	slender-leaved pondweed	X			
<i>Suaeda californica</i>	California seablite	X	X	X	
<i>Trifolium amoenum</i>	two-fork clover	X			
<i>Trifolium</i> <i>buckwestiorum</i>	Santa Cruz Clover		X		
<i>Trifolium hydrophilum</i>	saline clover	X	X	X	
<i>Trifolium polyodon</i>	Pacific Grove clover	X	X		
<i>Tropidocarpum</i> <i>capparideum</i>	caper-fruited tropidocarpum		X		
<i>Usnea longissima</i>	Methuselah's beard lichen	X			