BIOLOGICAL ASSESSMENT
1093 SAN BRUNO AVENUE
CITY OF BRISBANE
COUNTY OF SAN MATEO

DATE: MARCH 2, 2017
PERMIT TYPE: USE PERMIT AND HCP COMPLIANCE PERMIT
APPLICANT: ZHAOHUI MA
PROJECT LEAD: JULIA CAPASSO, ASSOCIATE PLANNER
TOTAL PARCEL SIZE: 0.48 ACRES
ASSESSOR PARCEL NUMBER: 007-553-160
PROJECT PROPOSAL DESCRIPTION: SINGLE-FAMILY HOME DEMOLITION AND SITE REDEVELOPMENT WITH SINGLE-FAMILY HOME.

PREPARED FOR SAN MATEO COUNTY PARKS DEPARTMENT BY:

As a Qualified Biologist, I hereby certify that this Biological Assessment was prepared according to the County Parks' requirements and that the statements furnished in the report and associated maps are true and correct to the best of my knowledge.

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BIOLOGICAL STUDY CHECKLIST

This Biological Assessment did provide adequate information to make recommended CEQA findings regarding potentially significant impacts. The City of Brisbane did not provide additional local projects to analyze for the cumulative impact analysis. Due to the limited size and impact of the project, we assume that the project impacts and cumulative impacts will have the same findings.

	PROJECT IMPACTS DEGREE OF EFFECT				CUMULATIVE IMPACT DEGREE OF EFFECT			
	N	LS	PS-M	PS	N	LS	PS-M	PS
Biological Resources	X				X			
Species		X				X		
Ecological Communities	X				X			
Habitat Connectivity	X				X			

N: No impact

LS: Less than significant impact

PS-M: Potentially significant unless mitigation incorporated

PS: Potentially significant

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ATTACHMENT A List of CNDDB Tracked Species Within 5 Miles of Project Site AT-1

SUMMARY

The proposed project at 1093San Bruno Avenue involves demolition of an existing, aging single-family home and redevelopment of the site with a new single-family home in the same footprint. No special-status wildlife or plant species were observed on the 0.48-acre site, nor were any sensitive plant communities, environmentally sensitive habitat areas, wildlife connectivity features, or waters or wetlands observed on site. No special-status plant species are expected to be on site based on the lack of suitable habitat. No significant project-specific or cumulative impacts will be made to any of the biological resources.

The project falls within the boundary of the San Bruno Mountain Habitat Conservation Plan area. Based on field investigations, review of available databases and literature, familiarity with local flora, on-site habitat suitability, and results of field studies in 2017, no HCP-covered wildlife or plant species were observed or considered to have the potential to occur within the survey area. No project-specific or cumulative impacts will be made to any HCP covered species.

Section 1. CONSTRUCTION FOOTPRINT DESIGN

Development Proposal Description
The project activities include the demolition of an existing, aging single-family home and redevelopment of the site with another single-family home in the same footprint. The site has a history of construction and construction associated grading activity.

Construction Footprint Size
The approximate area of the construction footprint where work will occur is yet to be determined.

Project Design for Impact Avoidance or Minimization
All work will be completed when there is minimal water flow so as to eliminate sediment migration. No aggressive or disruptive strategies will be employed in debris/vegetation removal.

Coastal Zone/Overlay Zones
The project area is not located in the coastal zone.

Zoning
There is no zoning data available for the project area.

Elevation
Elevation at the project site is approximately 75 feet above mean sea level.

Other
Not Applicable.

Section 2. SURVEY AREA DESCRIPTION AND METHODOLOGY

2.1. SURVEY PURPOSE

Discretionary actions undertaken by public agencies are required to demonstrate compliance with the California Environmental Quality Act (CEQA). The purpose of this Biological Assessment (BA) is to gather enough information about the biological resources associated with the proposed project, and their potential to be impacted by the project, to make a CEQA Initial Study significance finding for biological resources. In general, BA's are intended to:

- Provide an inventory of the biological resources on a project site and the values of those resources.
- Determine if a proposed project has the potential to impact any significant biological resources.
- Recommend project redesign to avoid, minimize, or reduce impacts to significant biological resources.
- Recommend additional studies necessary to adequately assess potential impacts and/or to develop adequate mitigation measures.
- Develop mitigation measures, when necessary, in cases where adequate information is available.

2.2. SURVEY AREA DESCRIPTION

2.2.1 SURVEY AREA 1 (SA1)

LOCATION

The project area is located on San Bruno Avenue in the City of Brisbane at the east base of the San Bruno Mountain (Figure 1). It lies west of Bayshore Boulevard and along the east side of San Bruno Avenue overlooking the nearby Brisbane Lagoon Fisherman's Park and the south San Francisco Bay waters to the east. The parcel is situated between residential and commercial properties interspersed throughout the easternmost reaches of the San Bruno Mountain foothills. The survey area and adjacent properties are characterized by substantial tree cover intermixed with clearings of shrubs and non-native grasses. The property lies within the San Bruno Mountain Habitat Conservation Plan area with San Bruno Mountain Park located approximately 0.25 miles to the west. It is depicted on the San Francisco South 7.5-minute USGS topographic quadrangle.

SURVEY AREA ENVIRONMENTAL SETTING

The survey area has an overall gradual slope with an easterly aspect but there are leveled areas where deteriorating structures currently stand. Elevation ranges from 93 feet above mean sea level at the northwest corner of the property to 45 feet above mean sea level at the east boundary. Average annual rainfall along the east base of the San Bruno Mountain is approximately 23 inches (PRISM 2007).

Overall, the survey area is characterized by urban mix or ruderal vegetation with both native and non-native tree cover. The parcel is among other residential and commercial properties with relatively high-

use roads and highways nearby causing elevated levels of noise and light pollution, therefore the disturbed site provides limited habitat.

No aquatic resources were identified within the survey area during the time of the reconnaissance survey. The reconnaissance survey was conducted after receiving approximately 0.37 inches of precipitation within the preceding 12 hours (NOAA 2017).

SURROUNDING AREA ENVIRONMENTAL SETTING

The project area is located within the Central Coast subregion of the California Floristic Province (Baldwin et al. 2012). As described in the *Ecological Subregions of California* (USDA 1997), the survey area is located within the San Francisco Peninsula subsection of the Central California Coast Section. The *Ecological Subregions of California* are the basis for describing regional variation in California alliance descriptions in *A Manual of California Vegetation* (Sawyer et al. 2009).

San Francisco Peninsula

The San Francisco Peninsula subsection is at the north end of a peninsula between the south part of San Francisco Bay and the Pacific Ocean that is characterized by a temperate and sub-humid climate with a significant marine influence (USDA 1997). Located just northeast of the San Andreas fault, this is a subsection of Franciscan rock hills surrounded by a plain of Quaternary marine and dune sand deposits (USDA 1997). Fluvial erosion is the main geomorphic process. Wind is also an active geomorphic agent, especially on the west side of the peninsula (USDA 1997). The peninsula is mainly comprised of Lithic Haplustolls and Pachic Argiustolls on bedrock, Ustic Dystropepts on marine sediments, and Psamments on stabilized dune deposits (USDA 1997). These soils are largely leached free of carbonates and soils in or near the tidal zone accumulate soluble salts (USDA 1997).

Mean annual precipitation for this region ranges from 20 to 25 inches, most all of which is rain (USDA 1997). Mean annual temperature is from 56° to 58° and mean freeze-free period is from 250 to 300 days (USDA 1997). Hydrologically, runoff is rapid from the hills, but slow from the alluvial plains. Streams are dry throughout the summer (USDA 1997).

COVER

Ground cover at the survey area is quantified as follows:

1% native vegetation

59% non-native vegetation

25% bare ground/cleared/graded

15% buildings, paved roads, other impervious cover

Figure 1. Project Location Map

>>> INSERT FIGURE HERE <<<

Figure 2. Site and Survey Map

>>> INSERT FIGURE HERE <<<

2.3. METHODOLOGY

2.3.1 REFERENCES

Background information for listed and special-status plant and wildlife species, and sensitive natural communities was compiled through a review of the following resources:

U.S. Fish and Wildlife Service (USFWS):

- Endangered and Threatened Wildlife and Plants (USFWS 1999, 2014)
- Federal Endangered and Threatened Species that Occur in or may be Affected by Projects in San Mateo County (USFWS 2017a)
- National Wetland Inventory for the San Francisco South Quadrangle (USFWS 2017b)

National Oceanic and Atmospheric Administration Fisheries (NOAA Fisheries):

- Endangered and Threatened Species; Establishment of Species of Concern List, Addition of Species to Species of Concern List, Description of Factors for Identifying Species of Concern, and Revision of Candidate Species List Under the Endangered Species Act (NOAA 2004)
- Endangered and Threatened Species; Revision of Species of Concern List, Candidate Species Definition, and Candidate Species List (NOAA 2006)

California Department of Fish and Wildlife (CDFW):

- California Natural Diversity Database (CNDDB) Query for the including Point Bonita, San Francisco North, San Francisco South, Oakland West, Hunters Point, Montara Mountain, and San Mateo (CDFW 2017a)
- List of California Vegetation Alliances and Associations. The Vegetation Classification and Mapping Program (CDFG 2010)
- State and Federally Listed Endangered, Threatened and Rare Plants of California (CDFW 2017b)
- State and Federally Listed Endangered and Threatened Animals of California (CDFW 2017c)
- Special Vascular Plants, Bryophytes, Lichens List (CDFW 2017d)
- Special Animals (CDFW 2017e)

Other Sources:

- The Jepson Manual, 2nd Edition (Baldwin et al. 2012)
- The California Native Plant Society's Inventory of Rare and Endangered Plants of California (CNPS 2001, 2017)
- A Manual of California Vegetation (Sawyer et al. 2009)
- Consortium of California Herbaria (CCH 2017)
- Flora of the Santa Cruz Mountains of California (Thomas 1960)
- A Flora of the San Bruno Mountains San Mateo County, California (McClintock et al. 1968)
- Illustrated Field Guide to the Woody Plants of the Santa Cruz Mountains (Corelli 2005)

Botanical taxonomy and nomenclature conforms to *The Jepson Manual, 2nd Edition* (Baldwin et al. 2012). Common names of plant species are derived from The Calflora Database (Calflora 2017). Land cover types and vegetation described herein conform to *California Vegetation* (Holland and Keil 1995), the *Preliminary Descriptions of the Terrestrial Natural Communities of California* (Holland 1986),

and/or *A Manual of California Vegetation* (Sawyer et al. 2009); wetland and deepwater habitat classifications conform to *Classification of Wetlands and Deepwater Habitats of the United States* (Cowardin et al. 1979), where appropriate.

Nomenclature for special-status plant species conform to the *Inventory of Rare and Endangered Plants of California* (CNPS 2001, 2017) and *Special Vascular Plants, Bryophytes and Lichens List* (CDFW 2017d). Nomenclature for common and special-status wildlife conforms to the nomenclature used in the *Complete List of Amphibian, Reptile, Bird and Mammal Species in California* (CDFW 2016), and the CNDDB (CDFW 2017a).

2.3.2 DEFINITIONS

The following terms were used to evaluate the sensitivity of on-site biological resources and potential impacts of the proposed project. Terms and definitions are derived from the CEQA Guidelines and regulatory agencies, where applicable.

Project Area — The project area comprises the entire parcel at 1093 San Bruno Avenue.

Project Footprint — The project footprint includes the area where demolition and redevelopment activities are planned, and will be smaller than the project area. The project footprint is to be determined.

Direct Impact — Impacts (or primary effects) which are caused by the project and occur at the same time and place [CEQA Guidelines, Title 14 CCR, Section 15358(a)(1)].

Indirect Impact — Impacts (or secondary effects) which are caused by the project and are later in time or farther removed in distance, but are still reasonably foreseeable. These may include growth-inducing effects and other effects related to induced changes in the pattern of land use, population density, or growth rate, and related effects on air and water and other natural systems, including ecosystems [CEQA Guidelines, Title 14 CCR, Section 15358(a)(2)].

Critical Habitat — Defined by the Endangered Species Act (ESA), as amended (Code of Federal Regulations, Title 50, Section 17), as "a specific geographic area(s) that is essential for the conservation of a threatened or endangered species and that may require special management and protection. Critical habitat may include an area that is not currently occupied by the species but that will be needed for its recovery." Critical habitat designations are published in the Federal Register. The final boundaries of the critical habitat area are also published in the Federal Register for federally listed species by USFWS and NOAA Fisheries.

DPS — A distinct population segment (DPS) is a vertebrate population or group of populations that are distinct from other populations of the species and significant in relation to the entire species. The ESA provides for listing species, subspecies, or distinct population segments of vertebrate species.

ESU — An evolutionarily significant unit (ESU) is a population or group of populations that is substantially reproductively isolated from other conspecific populations and that represents an important component of the evolutionary legacy of the species.

2.3.3 SIGNIFICANCE CRITERIA

The significance criteria are based in part on the Environmental Checklist (CEQA Guidelines Appendix G [Title 14 CCR, Section 15000-15387]). These criteria are used to determine the extent to which the proposed project would impact sensitive biological resources. The threshold of significance may vary for each species or habitat, and is determined by the lead agency. Using these guidelines, the project would result in a significant impact if it would:

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

Table 1. Survey Details

SURVEY KEY	SURVEY DATE	SURVEY AREA MAP KEYS	SURVEY TYPE	TIME PERIOD	METHODS/CONSTRAINTS	SURVEYORS
SD1_A	02/16/2017	SA1	Botanical	7:00 – 8:00 am	Wandering transects. Entire site was accessible.	Heath Bartosh (senior botanist) & Jaclyn Inkster (botanist)
SD1_B	02/16/2017	SA1	BA	7:00 – 8:00 am	Wandering transects. Entire site was accessible.	Erick Mahood (wildlife biologist)

Botanical: Botanical Survey

BA: Biological Assessment

Section 3. THE BIOLOGICAL INVENTORY

3.1. ECOLOGICAL COMMUNITIES

3.1.1 PLANT COMMUNITIES

Locally important or rare plant communities were not found within the survey area.

MAJOR PLANT COMMUNITIES SUMMARY

The only vegetation community present in the project areas was urban mix (Figure 3), which is described below. Table 2 relates vegetation types identified within the survey area to other commonly used vegetation classification systems including *Preliminary Descriptions of the Terrestrial Natural Communities of California* (Holland 1986), *California Vegetation* (Holland and Keil 1995), *Manual of California Vegetation, Second edition* (Sawyer et al. 2009), *CNPS Inventory of Rare and Endangered Plants of California* (CNPS 2001, 2017), and *Classification of Wetlands and Deepwater Habitats of the United States* (Cowardin et al. 1979The spatial distribution of vegetation types within the survey area are depicted in Figure 3.

Urban Mix

Urban mix is characterized as areas where non-native plants have either escaped or been ornamentally planted, for uses such as windrows, or in areas around urban or residential developments. In open areas surrounded by development it is not uncommon to find mixtures of non-native and native vegetation. Common examples of non-native plants found in urban mix include Monterey pine (*Pinus radiata*[+]), eucalyptus species (*Eucalyptus* sp.*), and acacias (*Acacia* sp.*), along with many shrubs, perennials, and ornamental vines (Holland and Keil 1995). However, there may also be remnant native species that intergrade with this vegetation type.

At the project area, prominent tree species included blue gum eucalyptus (*Eucalyptus globulus**), blackthorn acacia (*Acacia melanoxylon**), and douglas fir (*Pseudotsuga menziesii*). Shorter trees and shrubs were present including cotoneaster (*Cotoneaster* spp.*), narrowleaf firethorn (*Pyracantha angustifolium**), French broom (*Genista monspessulana**), and domestic almond (*Prunus dulcis**). Individual coast live oak (*Quercus agrifolia* var. *agrifolia*), and California buckeye (*Aesculus californica*) were present, although these may have been planted on site. The understory vegetation is comprised largely of non-native species indicative of disturbed systems including periwinkle (*Vinca major**), Bermuda buttercup (*Oxalis pes-caprae**), panic veldtgrass (*Ehrharta erecta**), and fennel (*Foeniculum vulgare**). The presence of Cape ivy (*Delairea odorata**) and English ivy (*Hedera helix**) severely inhibits growth of native species through their smothering growth habit.

[+] Denotes a species of native origin but not indigenous to the site
* Denotes a non-native species

Table 2. Plant Communities

Map Key	Vegetation Community and Wetland Classification Systems				Status	Condition	Acres Total	Acres Impacted
	Terrestrial Communities[1]	California & National Vegetation[2]	CNPS Inventory[3]	Wetlands & Deepwater Habitats[4]				
PC1	Urban Mix (Holland and Keil 1995)	Not Described	Not Described	Upland	None	Disturbed	0.48	0.48
						Totals	**0.48**	**0.48**

3.1.2 Physical Features

A rock outcrop physical feature was observed on the project area (Table 3).

Table 3. Physical Features

Map Key	Physical Feature	Comments
PF1	Rock outcrop	Bedrock exposed by prior construction and grading activities on site. Entirely overgrown with non-native English ivy (*Hedera helix**). This physical feature does not provide habitat for special-status species.

3.1.3 Waters and Wetlands

Waters and Wetlands Summary

No waters or wetlands were observed within the survey area.

[1] Terrestrial Natural Communities of California (Holland 1986) or (Holland & Keil 1995)
[2] List of Vegetation Alliances and Associations (CDFG 2010)
[3] CNPS Inventory of Rare and Endangered Plants of California Habitat Types (CNPS 2001)
[4] Classification of Wetlands & Deepwater Habitats of the U.S. (Cowardin et al. 1979)

Figure 3. Plant Communities Map

>>> INSERT FIGURE HERE <<<

3.2. SPECIES

3.2.1 OBSERVED SPECIES

During the February 2017 site visit, no special status wildlife or plant species were observed. A majority of the plant species observed were non-native. Of the native species present, many were represented by single specimens. Minimal wildlife species were observed on site.

3.2.2 PROTECTED TREES

A total of ten trees are slated for removal from the site which meet the requirements for 'protected tree' status under City of Brisbane Tree Regulations (BMC Chapter 12.12). The specific definition that defines these ten trees as protected is per BMC Section 12.12.020.8.

> *Where three (3) or more trees of any one or more species, each having a main stem or trunk which measures thirty (30) inches or greater in circumference at a height of twenty-four (24) inches above natural grade, are proposed to be removed at the same time from the same property or from contiguous properties under common ownership, such trees shall collectively be regarded as a protected tree.*

Impacts to these protected trees are anticipated to be mitigated at a 1:1 ratio.

3.2.3 SPECIAL-STATUS PLANTS

Special status plant species were not observed and are not expected to occur within the survey area. A total of 85 special-status plant species are known to occur in the project vicinity.[5] Based on habitats within the project area, a review of available databases and literature (USFWS 1999; 2017a,b,c; CDFW 2017a,b,d; CNPS, 2001, 2017; CCH 2017; Baldwin et al. 2012), and familiarity with the regional flora, it was determined that no rare plant species have the potential to occur within the project areas.

All 85 special-status plant species known from the vicinity were ruled out based on lack of suitable habitat such as coastal dunes, coastal bluff scrub, seeps, chaparral, and coniferous forest. Species were also ruled out due to the lack of appropriate bedrock or soil substrates, elevation ranges, distributional limits, or their absence during the February site visit. Table 4 lists information for all special-status plant species with CNDDB occurrences within 5 miles of the survey area.

Federal and/or State Listed and California Rare Plant Rank Species

Of the 85 special-status plant species known from the vicinity, 16 are federal and/or state listed. Based on field investigations, review of available databases and literature, familiarity with local flora, on-site habitat suitability, and results of field studies in 2017, none of the federal and/or state listed plant species were considered to have the potential to occur within the survey area. No federal and/or state listed species were observed during the 2017 site visit.

California Rare Plant Rank Species

[5] Vicinity is defined as the area included within the seven U.S. Geological Survey (USGS) 7.5-minute topographic quadrangles that are centered on the project areas, including Point Bonita, San Francisco North, San Francisco South, Oakland West, Hunters Point, Montara Mountain, and San Mateo.

Of the 85 special-status plant species known from the vicinity, all 85 are included in the California Native Plant Society Rare Plant Inventory (2001a; 2017). Based on field investigations, review of available databases and literature, familiarity with local flora, and on-site habitat suitability, no California Rare Plant Rank species were considered to have the potential to occur within the project areas. No California Rare Plant Rank species were observed during the 2017 site visit.

Special Status Butterfly Host/Nectar Plants
Nearby San Bruno Mountain Park is host to four special status butterflies; Mission blue (*Icaricia icarioides missionensis*), callippe silverspot (*Speyeria callippe callippe*), San Bruno elfin (*Callophrys mossii bayensis*), and Bay checkerspot (*Euphydryas editha bayensis*). Combined, these species rely on 19 native plant species as either host plants or nectar sources (TRA 1982, 2003, 2008). Based on field investigations, review of available databases and literature, familiarity with local flora, and on-site habitat suitability, no native host plants or nectar source plants were considered to have the potential to occur within the project areas. No native host plants or nectar source plants were observed during the 2017 site visit or are expected to occur.

3.2.4 SPECIAL-STATUS WILDLIFE SPECIES AND NESTS

Based on the field investigation, review of available databases and literature, familiarity with local fauna, and on-site habitat suitability, a total of 61 special-status fish and wildlife species were considered as part of this assessment (USFWS 1999a, 2017a,b; CDFW 2017a,c,e; NOAA 2004). Of these, two were determined to have a moderate potential to occur within the survey area and could be affected by the project as proposed. One species was determined to have a low potential to occur. These comprise non-listed species considered to be rare, sensitive or declining by agency or non-governmental watchlists. The remaining taxa were ruled out based on the lack of suitable habitat (e.g., salt marshes, serpentine, interior sand dunes, vernal pools, scrub, mud flats and shoreline habitats), local extirpations, lack of connectivity between areas of suitable and occupied habitat, incompatible land use, and habitat degradation. Table 4 lists information for all special-status wildlife species with CNDDB occurrences within 5 miles of the survey area and any other special-status wildlife species that were considered to have moderate or high potential to occur based on the presence of suitable habitat.

Invertebrates

Twenty-one federally- or State-listed, proposed, candidate, fully protected, sensitive or locally rare invertebrate species[6] were considered during the preparation of this assessment (CDFW 2017a); none were determined to have the potential to occur within the survey area.

Fish

Five federally- or State-listed, proposed, candidate, fully protected, sensitive or locally rare fish species[7] were considered during the preparation of this assessment (CDFW 2017a); none were determined to have the potential to occur within the survey area.

[6] Opler's longhorn moth, incredible harvestman, obscure bumble bee, western bumble bee, Tomales isopod, Edgewood blind harvestman, San Bruno elfin butterfly, sandy beach tiger beetle, monarch – California overwintering population, Stage's dufourine bee, Bay checkerspot butterfly, Ricksecker's water scavenger beetle, Leech's skyline diving beetle, San Francisco forktail damselfly, bumblebee scarab beetle, Mission blue butterfly, callippe silverspot butterfly, Myrtle's silverspot butterfly, San Francisco Bay Area leaf-cutter bee, mimic tryonia, Marin Hesperian.
[7] tidewater goby, hardhead, coho salmon – central California coast ESU, steelhead – central California coast DPS, longfin smelt.

Amphibians

Three federally- or State-listed, proposed, candidate, fully protected, sensitive or locally rare amphibian species[8] were considered during the preparation of this assessment (CDFW 2017a); none were determined to have the potential to occur within the survey area.

Reptiles

Two federally- or State-listed, proposed, candidate, fully protected, sensitive or locally rare reptile species[9] were considered during this assessment (CDFW 2017a); neither were determined to have the potential to occur within the survey area.

Birds

Sixteen federally- or State-listed, proposed, candidate, fully protected, sensitive or locally rare bird species[10] were considered during this assessment (CDFW 2017a); it was determined that one species, Cooper's hawk, has the potential to nest, roost, and forage within the survey area.

Cooper's Hawk (*Accipiter cooperii*)

Status, Distribution and Habitat Requirements

The Cooper's hawk (nesting) is included on the CDFW Watchlist (CDFW 2017a). Their range extends across the contiguous United States extending into southern Canada and Mexico, and are distributed throughout most of California (Curtis *et al*. 2006). Cooper's hawks inhabit dense stands of oak woodlands, riparian deciduous forests, or other forest habitats often near water and suburban areas (Baicich & Harrison 2005). This woodland raptor hunts in broken woodlands, along forest edges and suburban areas for medium-sized birds and mammals (Curtis *et al*. 2006). Typical nest site selection is characterized by mature trees with significant canopy cover; although, species will nest in suburban areas in a variety of trees (Curtis *et al*. 2006). Their breeding begins in April and are single-brooded (Baicich & Harrison 2005).

Habitat Suitability and Occurrence Data

Suitable nesting habitat is present among the mature trees on site and suitable foraging habitat is available in the open space of San Bruno Mountain Park and surrounding wooded areas west of the project site. Three occurrences are reported within 15 miles of the survey area; the nearest (EONDX 51279) is located approximately 11.7 miles to northeast in 2003 and was a nest in a large pine tree (CDFW 2017a). There are also several reported observations of the species within one mile of the survey area during the breeding season to eBird (eBird 2017). Due to the presence of suitable habitat, the species has the potential to occur within the survey area. No Cooper's hawks were observed during the field surveys.

Nesting Bird Summary

Protection is afforded to most bird species by the Migratory Bird Treaty Act (16 U.S.C. 703-712; MBTA) administered by the U.S. Fish and Wildlife Service (Division of Migratory Bird Management),

[8] California tiger salamander, California giant salamander, California red-legged frog
[9] western pond turtle, San Francisco gartersnake.
[10] Cooper's hawk, burrowing owl, marbled murrelet, western snowy plover, northern harrier, white-tailed kite, merlin, American peregrine falcon, saltmarsh common yellowthroat, California black rail, Alameda song sparrow, San Pablo song sparrow, double-crested cormorant, California clapper rail, bank swallow, California least tern.

which makes it unlawful, unless expressly authorized by permit pursuant to federal regulations, to "pursue, hunt, take, capture, kill, attempt to take, capture or kill, offer for sale, sell, offer to purchase, purchase, deliver for shipment, ship, cause to be shipped, deliver for transportation, transport, cause to be transported, carry, or cause to be carried by any means whatever, receive for shipment, transportation or carriage, or export at any time, or in any manner, any migratory bird, or any part, nest, or egg of any such bird." This includes direct and indirect acts, with the exception of harassment and habitat modification, which are not included unless they result in direct loss of birds, nests or eggs. In addition, the Migratory Bird Treaty Reform Act (Division E, Title I, Section 143 of the Consolidated Appropriations Act, 2005, PL 108–447; MBTRA), excludes all migratory birds non-native or that have been human introduced to the U.S. or its territories. It defines a native migratory bird as a species present within the U.S. and its territories as a result of natural biological or ecological processes. The California Fish and Game Code (CFGC) §3503 prohibits the take, possession, or needless destruction of the nest or eggs of any bird; §3503.5 prohibits the take, possession, or needless destruction of any nests, eggs or birds in the orders Falconiformes (new world vultures, hawks, eagles, ospreys and falcons, among others) or Strigiformes (owls); §3511 prohibits the take or possession of fully protected birds; and §3513 prohibits the take or possession of any migratory nongame bird or part thereof as designated in the MBTA. Most birds are protected under the MBTA and CFGC except for several nonnative species, including the European starling (*Sturnus vulgaris*) and the house sparrow (*Passer domesticus*).

Habitat suitable for nesting birds protected under the Migratory Bird Treaty Act is present throughout the survey area. Nesting birds have a high potential to occur within the survey area during the nesting bird season (February through August). The trees, structures, and ground all present suitable nesting substrate on site as bird species have variable nesting requirements and many are known to nest in urban mix vegetation.

Mammals

Fourteen federally- or State-listed, proposed, candidate, fully protected, sensitive or locally rare mammal species[11] were considered during the preparation of this assessment (CDFW 2017a); one species, hoary bat, was determined to have moderate potential to occur and a second species, fringed myotis, was determined to have low potential to occur within the survey area.

Special-Status Bats

Bats are widespread within California and may be found in any habitat. They are nocturnal, aerial predators of insects and other arthropods, and often forage over open water, marshes, and other moist, open areas where flying insects tend to congregate. Different bat species have different roosting requirements and roosts can be found in a variety of habitats and locations. Day roosts, used from sunrise to sunset, provide a protected and sheltered location for bats to rest and sleep within a short flight to foraging areas and a site to raise their young (Erickson et al. 2002). During the day, bats may use three types of roosts: crevices, cavities, and foliage. Crevice and cavity roosts may be found in natural and human-made features such as caves, cliffs, rock outcrops, trees, mines, buildings, bridges, and tunnels. During the breeding season (April through September), crevice and cavity roosting species typically gather in groups of mothers and young (maternity colonies) that may number in the thousands or even tens of thousands of individuals. In contrast, foliage-roosting bats may be solitary or occur in small

[11] Pallid bat, Townsend's big-eared bat, Santa Cruz kangaroo rat, southern sea otter, western red bat, hoary bat, fringed myotis, San Francisco dusky-footed woodrat, big free-tailed bat, salt-marsh harvest mouse, Angel Island mole, Alameda Island mole, American badger, and Point Reyes jumping mouse.

groups while breeding. Roosts used during the day and as maternity roosts tend to be well-hidden and require precise temperature and humidity conditions.

Night roosts, which are used from approximately sunset to sunrise, are primarily sites where animals congregate to rest and digest their food between foraging bouts (Erickson et al. 2002). Night roosts are often located in more open but protected areas such as overhangs on buildings and recessed areas on the undersides of bridges. Five special-status bat species have the potential to occur within the study area based on range, habitat, and recorded occurrences in the region. CNDDB occurrences are reported in the individual species descriptions below. Bats in general may be under-reported to the CNDDB relative to their actual abundance in the environment because they are nocturnal, difficult to detect, and difficult to positively identify and count when detected. California Fish and Game Code Section 4150 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 CDFW. Bats are classified as non-game mammals and are afforded protection under various sections of the CFGC. They also receive protection under the California Code of Regulations and the California Public Resources Code. Activities resulting in mortality of non-game mammals or disturbances that causes the loss of maternity colonies of bats may be considered "take" by CDFW.

Hoary Bat *(Lasiurus cinereus)*

Status, Distribution and Habitat Requirements

The hoary bat is included on CDFW's California State Special Animals List and is listed as a Medium-priority species by the Western Bat Working Group (CDFW 2017e). It is a widespread species found in a variety of habitats throughout California. This solitary bat is most commonly found in association with forested habitats near water (CDFW 2017a). Hoary bats roost in the foliage of evergreens and secondarily in deciduous trees, particularly in edge habitat (Bolster 2017). Preferred sites are hidden from above, with few branches below, and have ground cover of low reflectivity. Females and young tend to roost at higher sites. They forage in small to large groups on large prey such as moths, beetles and dragonflies (Barclay 1985). Habitats suitable for bearing young include all woodlands and forests with medium to large-size trees and dense foliage. Hoary bats have been recorded from sea level to 4125 m (13,200 ft). Females give birth to young in mid-May through early July. There is evidence that sexes are separate during warm months, females being more abundant in the northeastern US, males in the west. Both sexes occur in the winter range. During migration in southern California, males are found in foothills, deserts and mountains; females in lowlands and coastal valleys (Vaughan and Krutsch 1954). During spring and fall migration, large groups are encountered.

This species is nocturnal and emerges late in the evening. Peak activity varies with season and location, but is usually around 3-5 hours after sunset. Individuals wintering in cold climates hibernate, but may be active on warm winter days. The hoary bat tolerates a wide range of air temperatures, and has been found foraging at temperatures of 32-72 degrees Fahrenheit.

Habitat Suitability and Occurrence Data

Roosting habitat for the hoary bat is available within the large evergreens and deciduous trees on site. The immediate survey area lacks water and edge habitat and is thus not preferred habitat; however, the species has been known to occur in suburban and even urban environments. There are three reported CNDDB occurrences within 5 miles of the survey area; the nearest occurrence (EONDX #68779) is approximately 2.7 miles to the north observed in the Gilman Playground of San Francisco in 1951.

Fringed Myotis (*Myotis thysanodes***)**

Status, Distribution and Habitat Requirements

The fringed myotis bat is included on CDFW's Special Animals List and is listed as a High Priority Species by the WBWG. The range of the fringed myotis extends through much of western North America from southern British Columbia, Canada, south to Chiapas, Mexico and from Santa Cruz Island in California, east to the Black Hills of South Dakota (WBWG 2017). It occurs from sea level to 9,350 feet but is most common at middle elevations (3,937 to 6,890 feet). The distribution of the species is patchy. Although it appears to be most common in drier woodlands (oak, pinyon-juniper, ponderosa pine), it is found in a wide variety of habitats including desert scrub, mesic coniferous forest, grassland, and sage-grass steppe (WBWG 2017).

The fringed myotis roosts in crevices in buildings, underground mines, rocks, cliff faces, and bridges (WBWG 2017). Roosting in decadent trees and snags, particularly large ones, is common throughout its range in the western U.S. and Canada. Fringed myotis roosts have been documented in a large variety of tree species and it is likely that structural characteristics (e.g., height, decay stage) rather than tree species play a greater role in selection of a snag or tree as a roost. Maternity roosts are colonial with colonies ranging from 10 to 2,000 individuals, though large colonies are exceedingly rare. Much less information is available on roosts of males, but it is thought that they roost singly or in small groups. The information available on hibernation is largely limited to an accounting of the types of structures used as hibernacula, which include caves, mines, and buildings.

Habitat Suitability and Occurrence Data

Suitable roosting habitat is present within the aging sheds and structures as well as beneath the wood walkway along San Bruno Avenue. However, the survey area is not considered preferred habitat for fringed myotis. The nearest CNDDB occurrence is approximately 5 miles southwest of the survey area observed between Crystal Springs reservoir and Skyline Blvd near San Mateo in 2005.

Table 4. Potential Special-Status Species

Map Key	Survey/ Source	Scientific Name	Common Name	Species Status[1]	Potential to Occur	Habitat Requirements	Adequate Habitat Onsite	Adequate Habitat Size	Acreage Impacted	Comments
Federal/State Listed, Proposed, Candidate and/or Fully Protected Species										
Plants:										
SSP1	CNDDB	*Amsinckia lunaris*	bent-flowered fiddleneck	CRPR 1B.1	None	Chaparral, and ultramafic, valley, and foothill grassland	No. Suitable habitat not present.	N/A.	0	The nearest occurrence (EONDX #49038) is a non-specific area 1.25 miles west of the survey area reported in 1963.
SSP1	CNDDB	*Arctostaphylos imbricata*	San Bruno manzanita	SE, CRPR 1B.1	None	Chaparral, coastal prairie, coastal scrub, and ultramafic.	No. Suitable habitat not present.	N/A.	0	The nearest occurrence (EONDX #220222) is a non-specific area .85 miles to the west in San Bruno Mountain Park reported in 1981.
SSP1	CNDDB	*Arctostaphylos montaraensis*	Montara manzanita	CRPR 1B.2	None	Chaparral and coastal scrub.	No. Suitable habitat not present.	N/A.	0	The nearest occurrence (EONDX #220208) is a specific point ~2 miles to the west in San Bruno Mountain Park reported in 2010.
SSP1	CNDDB	*Arctostaphylos pacifica*	Pacific manzanita	SE, CRPR 1B.2	None	Chaparral and coastal scrub.	No. Suitable habitat not present.	N/A.	0	The nearest occurrence (EONDX #3253) is a non-specific area ~2 miles to the west in San Bruno Mountain Park reported in 2007.
SSP1	CNDDB	*Chorizanthe cuspidata* var. *cuspidata*	San Francisco Bay spineflower	CRPR 1B.2	None	Coastal bluff scrub, coastal dunes, coastal prairie, and coastal scrub.	No. Suitable habitat not present.	N/A.	0	The nearest occurrence (EONDX #56) is a specific point 3.5 miles west northwest in San Bruno Mountain Park reported in 1992.
SSP1	CNDDB	*Chorizanthe robusta* var. *robusta*	Robust spineflower	FE, CRPR 1B.1	None	Broadleaved upland forest, coastal bluff scrub, and coastal dunes.	No. Suitable habitat not present.	N/A.	0	The nearest occurrence (EONDX #30377) is a specific point 3.5 miles west in San Bruno Mountain Park reported in 1913.

Map Key	Survey/ Source	Scientific Name	Common Name	Species Status[1]	Potential to Occur	Habitat Requirements	Adequate Habitat Onsite	Adequate Habitat Size	Acreage Impacted	Comments
SSP1	CNDDB	*Collinsia multicolor*	San Francisco collinsia	CRPR 1B.2	None	Closed-cone coniferous forest, and coastal scrub.	No. Suitable habitat not present.	N/A.	0	The nearest occurrence (EONDX #56889) is a non-specific area 0.5 miles west southwest in San Bruno Mountain Park reported in 1988.
SSP1	CNDDB	*Fritillaria liliacea*	fragrant fritillary	CRPR 1B.2	None	Cismontane woodland, coastal prairie, coastal scrub, and ultramafic, valley and foothill grassland.	No. Suitable habitat not present.	N/A.	0	The nearest occurrence (EONDX #84457) is a specific point 4.5 miles north. This record is undated.
SSP1	CNDDB	*Grindelia hirsutula* ssp. *maritima*	San Francisco gumplant	CRPR 3.2	None	Coastal bluff scrub, coastal scrub, and ultramafic, valley, and foothill grassland.	No. Suitable habitat not present.	N/A.	0	The nearest occurrence (EONDX #16948) is a non-specific area 2.75 miles north northwest in San Bruno Mountain Park reported in 1961.
SSP1	CNDDB	*Helianthella castanea*	Diablo helianthella	CRPR 1B.2	None	Broadleaved upland forest, chaparral, cismontane woodland, coastal scrub, and valley and foothill grassland.	No. Suitable habitat not present.	N/A.	0	The nearest occurrence (EONDX #16948) is a non-specific area ~0.5 miles west in San Bruno Mountain Park reported in 2012.
SSP1	CNDDB	*Hemizonia congesta* ssp. *congesta*	congested-headed tarplant	CRPR 1B.2	None	Valley and foothill grassland.	No. Suitable habitat not present.	N/A.	0	The nearest occurrence (EONDX #73833) is a non-specific area 3.25 miles west southwest reported in 1909.
SSP1	CNDDB	*Hesperevax sparsiflora* var. *brevifolia*	short-leaved evax	CRPR 1B.2	None	Coastal bluff scrub, coastal dunes, and coastal prairie.	No. Suitable habitat not present.	N/A.	0	The nearest occurrence (EONDX #60194) is a non-specific area 3 miles north northwest. This report is undated.
SSP1	CNDDB	*Horkelia cuneate* var. *sericea*	Kellog's horkelia	CRPR 1B.1	None	Chaparral, closed-cone coniferous forest, coastal dunes, and coastal scrub.	No. Suitable habitat not present.	N/A.	0	The nearest occurrence (EONDX #30376) is a non-specific area 3.5 miles west reported in the 1980's.

Map Key	Survey/ Source	Scientific Name	Common Name	Species Status[1]	Potential to Occur	Habitat Requirements	Adequate Habitat Onsite	Adequate Habitat Size	Acreage Impacted	Comments
SSP1	CNDDB	*Horkelia marinensis*	Point Reyes horkelia	CRPR 1B.2	None	Coastal dunes, coastal prairie, and coastal scrub.	No. Suitable habitat not present.	N/A.	0	The nearest occurrence (EONDX #99735) is a non-specific area 3.5 miles west reported in 1909.
SSP1	CNDDB	*Lessingia germanoru*	San Francisco lessingia	FE, SE, CRPR 1B.1	None	Coastal scrub.	No. Suitable habitat not present.	N/A.	0	The nearest occurrence (EONDX #55) is a specific point 3.6 miles west northwest reported in 1999.
SSP1	CNDDB	*Pentachaeta bellidiflora*	white-rayed pentachaeta	FE, SE, CRPR 1B.1	None	Ultramafic, valley, and foothill grassland.	No. Suitable habitat not present.	N/A.	0	The nearest occurrence (EONDX #16681) is a non-specific area 0.25 miles southwest. This record is undated.
SSP1	CNDDB	*Plagiobothrys chorisianus* var. *chorisianus*	Choris' popcorn flower	CRPR 1B.2	None	Chaparral, coastal prairie, and coastal scrub.	No. Suitable habitat not present.	N/A.	0	The nearest occurrence (EONDX #94302) is a specific point 2 miles west in San Bruno Mountain Park reported in 1961.
SSP1	CNDDB	*Silene verecunda* ssp. *verecunda*	San Francisco campion	CRPR 1B.2	None	Chaparral, coastal bluff scrub, coastal prairie, coastal scrub, and ultramafic, valley, and foothill grassland.	No. Suitable habitat not present.	N/A.	0	The nearest occurrence (EONDX #21266) is a specific point 2.3 miles west in San Bruno Mountain Park reported in 1994.
SSP1	CNDDB	*Suaeda californica*	California seablite	FE, CRPR 1B.1	None	Freshwater marsh, marsh/swamp, and wetland.	No. Suitable habitat not present.	N/A.	0	The nearest occurrence (EONDX #21266) is a specific point 4 miles northeast reported in 2014.
SSP1	CNDDB	*Trifolium amoenum*	two-fork clover	FE, CRPR 1B.1	None	Coastal bluff scrub and, ultramafic, valley, and foothill grassland.	No. Suitable habitat not present.	N/A.	0	The nearest occurrence (EONDX #84559) is a specific point 3.5 miles west of the project area reported in 1907.

Map Key	Survey/ Source	Scientific Name	Common Name	Species Status[1]	Potential to Occur	Habitat Requirements	Adequate Habitat Onsite	Adequate Habitat Size	Acreage Impacted	Comments
SSP1	CNDDB	*Triphysaria floribunda*	San Francisco owl's clover	CRPR 1B.2	None	Coastal prairie, coastal scrub, and ultramafic, valley, and foothill grassland.	No. Suitable habitat not present.	N/A.	0	The nearest occurrence (EONDX #17744) is a non-specific area 1.1 miles west of the project area reported in 1907.
SSP1	CNDDB	*Triquetrella californica*	Coastal triquetrella	C	None	Coastal bluff scrub and coastal scrub.	No. Suitable habitat not present.	N/A.	0	The nearest occurrence (EONDX #95385) is a non-specific area 2.3 miles west of the project area reported in 2013.
Invertebrates:										
SSP2	CNDDB	*Callophrys mossii bayensis*	San Bruno elfin butterfly	FE, CH Xerces-CI	None	A small brownish butterfly that occurs in the vicinity of its larval host plant the stonecrop (*Sedum spathulifolium*). Flight period is late February to April. Range is restricted to small populations on north facing slopes in the fog belt in the coastal hills of the northern San Francisco Peninsula.	No, host plant absent.	N/A.	0	The nearest occurrence (EONDX #23061) is a specific point ~2.3 miles to the west in San Bruno Mountain Park, recorded in 2004.
SSP2	CNDDB	*Euphydryas editha bayensis*	Bay checkerspot butterfly	FT, CH, Xerces-CI	None	A California endemic butterfly restricted to serpentine and similar habitats. Host plant is the dwarf plantain (*Plantago erecta*) (Steiner 1990). Secondary host plants include Indian paintbrush (*Castilleja affinis* ssp. *affinis*) and purple owl's clover (*Castilleja exserta* ssp. *exserta*). Restricted to six locals in San Francisco (San Bruno Mountain State & County Park), San Mateo (Edgewood County Park and El Corte de Madera) and Santa Clara (Kirby, Metcalf, San Felipe & Silver Creek Hills) counties (USFWS 1998).	No, host plants absent.	N/A.	0	The nearest occurrence (EONDX #22988) is a non-specific point ~0.5 miles west northwest from the survey area recorded in 1980.

G.1.57

Map Key	Survey/ Source	Scientific Name	Common Name	Species Status[1]	Potential to Occur	Habitat Requirements	Adequate Habitat Onsite	Adequate Habitat Size	Acreage Impacted	Comments
SSP2	CNDDB	*Icaricia icarioides missionensis*	Mission blue butterfly	FE, CH Xerces-CI	None	A small butterfly measuring 1½ inches. The larval host plants include three species of lupine (*Lupinus albifrons*, *L. formosus* and *L. versicolor*). Secondary food plants include bluedicks (*Dichelostemma capitatum*), false goldenaster (*Heterotheca villosa*) and seaside buckwheat (*Eriogonum latifolium*). The flight season occurs from March through July. Remaining populations are restricted to Twin Peaks in San Francisco, Fort Baker in Marin County, San Bruno Mountain, and Crystal Springs Watershed in San Mateo County.	No, larval host plants and secondary food plants absent.	N/A.	0	The nearest occurrence (EONDX #23004) is a specific area ~1 mile to the west in San Bruno Mountain Park reported in 2000.
SSP2	CNDDB	*Speyeria callippe callippe*	Callippe silverspot butterfly	FE, Xerces-CI	None	A medium-sized butterfly that is endemic to native grasslands with the host plant Johnny jump-up (*Viola pedunculata*). Violas typically grow on hilltops. The active adult period occurs between May and July. Current distribution is restricted to seven locals in San Mateo, Sonoma and Alameda counties.	No, suitable habitat and host plants absent.	N/A.	0	The nearest occurrence (EONDX #14466) is a specific area ~1 mile to the west in San Bruno Mountain Park reported in 2004.
Amphibians:										

G.1.58

Map Key	Survey/ Source	Scientific Name	Common Name	Species Status[1]	Potential to Occur	Habitat Requirements	Adequate Habitat Onsite	Adequate Habitat Size	Acreage Impacted	Comments
SSP2	CNDDB	*Ranadraytonii*	California red-legged frog	FT, CH, SSC	None	A medium-sized frog that inhabits lowlands & foothills in or near permanent sources of deep water with dense, shrubby or emergent riparian vegetation up to 4,921 feet (1,500 meters) in elevation (Jennings and Hayes 1994, Bulger et al. 2003, Stebbins 2003). Range extends from Redding to Baja California. Designated critical habitat encompasses 1,636,609 acres in 20 counties and is grouped into 4 regions: Central Valley, Southern San Joaquin, East Bay and Central Coast (75 FR 12816). Primary constituent elements include: (1) aquatic breeding habitat; (2) non-breeding aquatic and riparian habitat; (3) Upland habitats associated with riparian and aquatic habitat; and (4) dispersal habitat that comprising accessible upland or riparian habitat within and between occupied or previously occupied sites that are located within 1 mi (1.6 km) of each other, and that support movement between such sites (75 FR 12816).	No, no suitable habitat present. Site lacks riparian and aquatic habitat and is not within dispersal distance of suitable aquatic habitat.	N/A	0	The nearest occurrence (EONDX #76391) is a specific area ~3.9 miles south of the project site reported in 2008. The sighting was made in a canal with riparian willow scrub and pampas grass between San Antonio Avenue and Hwy 101.
Reptiles:										

G.1.59

Map Key	Survey/ Source	Scientific Name	Common Name	Species Status[1]	Potential to Occur	Habitat Requirements	Adequate Habitat Onsite	Adequate Habitat Size	Acreage Impacted	Comments
SSP2	CNDDB	*Thamnophis sirtalis tetrataenia*	San Francisco garter snake	FE, SE	None	A colorful aquatic garter snake endemic to the San Francisco Bay Area. Distributed along the peninsula from the southern San Francisco County border south to Waddell Lagoon south of Año Nuevo. Occurs sympatrically with its primary prey, California red-legged frog (*Rana aurora draytonii*). Species may hibernate near coast in fossorial mammal burrows and other refuges or remain active year-round weather permitting.	No, no suitable habitat present. Site lacks riparian habitat.	N/A	0	The nearest occurrence (EONDX #93159) is a non-specific point ~2.2 miles from the project with the record dating back to 1975.
Birds:										
SSP2	CNDDB	*Rallus obsoletus*	Ridgway's rail	FE, SE, FP	None	A member of the rail family, Rallidae, it is restricted to the San Francisco Bay Area. Inhabits coastal wetlands dominated by pickleweed (Salicornia spp.) and cordgrass (Spartina spp.). Wintering habitat similar to breeding habitat. Breeding begins in March; single-brooded (Baicich & Harrison 2005).	No, no suitable habitat present.	N/A	0	The nearest occurrence (EONDX #25847) is a non-specific point ~1.8 miles south in the salt marshes near San Bruno Point recorded in 1975.
Sensitive and Locally Rare Species										
Invertebrates:										
SSP2	CNDDB	*Banksula incredula*	Incredible harvestman	SA	None	Inhabits Franciscan sandstone talus slopes in dense chaparral canopy. Restricted to one type locality on the north slope of San Bruno Mountain ridge. Only one of its genus not found in caves (Shanks, CDFG, date unknown).	No, no suitable habitat present.	N/A.	0	The nearest occurrence (EONDX #59243) is a specific point ~1.9 miles to the east in San Bruno Mountain Park.

G.1.60

Map Key	Survey/ Source	Scientific Name	Common Name	Species Status[1]	Potential to Occur	Habitat Requirements	Adequate Habitat Onsite	Adequate Habitat Size	Acreage Impacted	Comments
SSP2	CNDDB	*Caecidotea tomalensis*	Tomales isopod	SA	None	A freshwater crustacean inhabiting freshwater ponds, marshes and slow moving streams in Marin, Sonoma, San Francisco and San Mateo counties.	No, no freshwater aquatic resources present.	N/A.	0	The nearest occurrence (EONDX #22592) is a specific point ~4.7 miles southwest in a pond off of Skyline Blvd, recorded in 1984.
SSP2	CNDDB	*Dufourea stagei*	Stage's dufourine bee	SA	None	A solitary ground-nesting bee in coastal scrub habitat presumed to be endemic to the San Francisco and San Mateo counties. Range is from San Bruno Mountain, south to Santa Cruz Mountains area.	No, no coastal scrub habitat present.	N/A.	0	The nearest occurrence (EONDX #59985) is a specific area ~2 miles west, dating back to 1962.
SSP2	CNDDB	*Hydroporus leechi*	Leech's skyline diving beetle	SA	None	Little information is available about the species' life history, habitat requirements and distribution. Initially known from a single location near Pacifica, San Mateo County; recent study has found species to be more widespread. Inhabits freshwater ponds.	No, no freshwater aquatic resources present.	N/A.	0	The nearest occurrence (EONDX #60343) is a non-specific area ~4.7 miles southwest, dating back to 1988.
SSP2	CNDDB	*Ischnura gemina*	San Francisco forktail damselfly	SA	None	A damselfly endemic to Marin, San Francisco and San Mateo counties. Inhabits marshes, ponds and ditches with emergent and/or floating vegetation.	No, no suitable habitat present.	N/A.	0	The nearest occurrence (EONDX #60808) is a non-specific area ~1.5 miles north, dating back to 1978.
Birds:										
SSP2	CNDDB	*Accipiter cooperii*	Cooper's hawk (nesting)	WL	Moderate	Inhabits dense stands of oak woodlands, riparian deciduous forests, or other forest habitats often near water and suburban areas. Hunts in broken woodlands and along forest edges. Breeding begins in April; single-brooded (Baicich & Harrison 2005).	Yes	Yes	TBD	Suitable nesting habitat is present on-site. Potential for nesting within mature trees.

G.1.61

Map Key	Survey/ Source	Scientific Name	Common Name	Species Status[1]	Potential to Occur	Habitat Requirements	Adequate Habitat Onsite	Adequate Habitat Size	Acreage Impacted	Comments
SSP2	CNDDB	*Geothlypis trichas sinuosa*	saltmarsh common yellowthroat	SSC, BCC	None	Year-round resident of the San Francisco Bay Area. Inhabits dense vegetation in wetlands, marshes, estuaries, prairies and riparian areas of San Francisco and San Pablo bays, and along the coastal areas of Marin, San Francisco, and San Mateo counties (Shuford and Gardali 2008). Breeds from mid-March to late July; double-brooded (Baicich & Harrison 2005, Shuford and Gardali 2008).	No, no suitable habitat present.	N/A.	TBD	The nearest occurrence (EONDX #59842) is a non-specific area ~5 miles southwest of the site recorded in 2001 north of San Andreas Lake.
SSP2	CNDDB	*Melospiza melodia pusillula*	Alameda song sparrow	SSC, BCC	None	One of four subspecies in the San Francisco Bay Area. Endemic to the southern San Francisco Bay tidal marshlands. Breeding begins in April; often triple-brooded (Baicich & Harrison 2005).	No, no suitable tidal marshland habitat is present on site.	N/A.	TBD	The nearest occurrence (EONDX #60969) is a non-specific point ~2.5 miles southwest of the survey area dating back to 1940. Observed near Colma Creek.
Mammals:										
SSP2	CNDDB	*Lasiurus cinereus*	hoary bat	SA, WBW G-M	Moderate	Ubiquitous throughout California. A solitary foliage rooster that prefers evergreens, but will use deciduous trees in forested habitats, particularly in edge habitat (Bolster 2017). May forage in small to large groups. Feeds primarily on moths, but will eat a variety of other insects. Migrates great distances.	Yes	Yes	TBD	The nearest occurrence (EONDX #68779) is a non-specific point ~2.7 miles north dating back to 1951.

G.1.62

Map Key	Survey/ Source	Scientific Name	Common Name	Species Status[1]	Potential to Occur	Habitat Requirements	Adequate Habitat Onsite	Adequate Habitat Size	Acreage Impacted	Comments
SSP2	CNDDB	*Myotis thysanodes*	fringed myotis	WBW G-H	Low	Exhibits a strong roosting preference for large trees and snags, but will use buildings, caves, rock crevices, etc. if necessary. Inhabits a variety of woodland, scrub and grassland habitats up to 2,850 meters throughout California except for Central Valley and southern deserts. Forages great distances and is active during winter months. Highly sensitive to human disturbance.	Yes, potential roosting habitat present but preferred vegetation types not present.	Yes	TBD	The nearest occurrence (EONDX #68551) is a non-specific point ~5 miles southwest between Crystal Springs reservoir and Skyline Blvd.

G.1.63

Map Key	Survey/ Source	Scientific Name	Common Name	Species Status[1]	Potential to Occur	Habitat Requirements	Adequate Habitat Onsite	Adequate Habitat Size	Acreage Impacted	Comments

Explanation of State and Federal Listing Codes

Federal listing codes:

FE	Federally listed as Endangered
FT	Federally listed as Threatened
FPE	Federally proposed for listing as Endangered
FPT	Federally proposed for listing as Threatened
FPD	Federally proposed for delisting
FC	Federal candidate species (former Category 1 candidates)
SC	Species of Concern (NMFS regulated species only)
CH	Critical Habitat (Proposed or Final) is designated
SSC	Species of Special Concern designated by the Marine Mammal Commission
FSC	Federal Species of Concern – No longer maintained by USFWS Sacramento Regional Office
SLC	Species of local concern or conservation importance – No longer maintained by USFWS

California listing codes:

SE	State listed as Endangered
ST	State listed as Threatened
SCE	State candidate for listing as Endangered
SCT	State candidate for listing as Threatened
SCD	State candidate for delisting
SSC	California Species of Special Concern
FP	Fully Protected
WL	Watch List

ABC	The American Bird conservancy maintains a Green List of all the highest priority birds for conservation in the continental United States and Canada. Based off the species assessments prepared by Partners in Flight (PIF) and has been expanded to include shorebirds, waterbirds and waterfowl.
AFS	American Fisheries Society identifies marine, estuarine and diadromous fish species that are at risk of extinction in North America. The AFS has designated the following four classifications in order of conservation importance E – Endangered, T – Threatened, V – Vulnerable, and CD – Conservation Dependent.
BCC	U.S. Fish and Wildlife Service Birds of Conservation Concern. List of migratory and nonmigratory bird species (beyond those already designated as federally threatened or endangered) that represent the Service's highest conservation priorities.
SA	"Special Animals" is a general term that refers to all of the taxa the CNDDB is interested in tracking, regardless of their legal or protection status. This list is also referred to as the list of "species at risk" or "special status species". The Department of Fish and Wildlife considers the taxa on this list to be those of greatest conservation need.
WBWG	Western Bat Working Group: H – High Priority indicates species that are imperiled or are at high risk of imperilment based on available information on distribution, status, ecology and known threats; M – Medium Priority indicates a lack of information to assess the species' status; L – Low Priority indicates relatively stable populations based on available data. The WBWG also uses intermediary designations including MH – Medium-High and LM – Low-Medium priorities.
Xerces	Xerces Society for Invertebrate Conservation. Red List identifies endangered, threatened or at-risk pollinator species. PE – Possibly Extinct indicates species only known from historical occurrences; CI – Critically Imperiled indicates species at very high risk of extinction; I – Imperiled indicates species at high risk of extinction; V – Vulnerable indicates species at moderate risk of extinction; DD – Data Deficient indicates lack of information to sufficiently assess status.
RPR	1B: Plants that are rare, Threatened, or Endangered in California and elsewhere; 2: Plants that are rare, Threatened, or Endangered in California, but are more numerous elsewhere; 4: Plants of limited distribution (a watch list). .1: Seriously Endangered in California (over 80% of occurrences Threatened / high degree and immediacy of threat) .2: Fairly Endangered in California (20-80% occurrences Threatened) .3: Not very Endangered in California (<20% of occurrences Threatened or no current threats known)

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Figure 4. Potentially Occurring Plant Species Map

>>> INSERT FIGURE HERE <<<

Figure 5. Potentially Occurring Wildlife Species Map

>>> INSERT FIGURE HERE <<<

3.2.5 NOXIOUS/INVASIVE WEEDS

During the course of the survey, non-native plant species were encountered within the survey area. A non-native plant species is defined as a species that is occurring outside of its native distributional range and the species has arrived there by human activity.

Some of the non-native plant species encountered on-site are tracked by the California Department of Food and Agriculture (CDFA 2017) and the California Invasive Plant Council (Cal-IPC 2017) due to their noxious or invasive behavior. Species tracked by these organizations are given a certain rating based on criteria such as ecological impacts, treatment or eradication priority, and threats they pose to agricultural economics. Rating classifications given by Cal-IPC and CDFA are shown in Table 5.

Of the non-native plant species tracked by Cal-IPC and CDFA, twelve plant species observed within the survey area are of concern due to their invasiveness (Table 5).

Table 5. Invasive Plants Observed in the Survey Area

Species Name	Common Name	California Invasive Plant Council Rank (Cal-IPC 2017)*	California Department of Food and Agriculture Noxious Weed List (CDFA 2017)**
Acacia melanoxylon	blackwood acacia	Limited	---
Cortaderia sp.	---	High	---
Crocosmia x *crocosmiiflora*	montbretia	Limited	---
Delairea odorata	Cape-ivy	High	On List
Ehrharta erecta	panic veldtgrass	Moderate	---
Eucalyptus globulus	blue gum eucalyptus	Limited	---
Foeniculum vulgare	fennel	High	---
Genista monspessulana	French broom	High	On List
Hedera helix	English ivy	High	---
Oxalis pes-caprae	Bermuda buttercup	Moderate	---
Plantago lanceolata	buckhorn plantain	Limited	---
Vinca major	periwinkle	Moderate	---

*Cal-IPC Weed Ranking Definitions:

High: These species have severe ecological impacts on physical processes, plant and animal communities, and vegetation structure. Their reproductive biology and other attributes are conducive to moderate to high rates of dispersal and establishment. Most are widely distributed ecologically.

Moderate: These species have substantial and apparent - but generally not severe - ecological impacts on physical processes, plant and animal communities, and vegetation structure. Their reproductive biology and other attributes are conducive to moderate to high rates of dispersal, though establishment is generally dependent upon ecological disturbance. Ecological amplitude and distribution may range from limited to widespread.

Limited: These species are invasive but their ecological impacts are minor on a statewide level or there was not enough information to justify a higher score. Their reproductive biology and other attributes result in low to moderate rates of invasiveness. Ecological amplitude and distribution are generally limited, but these species may be locally persistent and problematic (Cal-IPC 2017).

** Species considered a noxious weed by CDFA are listed on the California Noxious Weed List (CDFA 2017).

3.3. WILDLIFE MOVEMENT AND CONNECTIVITY

Wildlife movement or connectivity features, or evidence thereof, were not observed within the survey area.

Habitat loss, fragmentation, and degradation resulting from land use changes or habitat conversion can alter the use and viability of wildlife movement corridors (*i.e*. linear habitats that naturally connect and provide passage between two or more otherwise disjunct larger habitats or habitat fragments). In general, studies suggest that habitat corridors provide connectivity for and are used by wildlife, and as such, are an important conservation tool (Beier and Noss 1998). According to Beier and Loe (1992), wildlife habitat corridors should fulfill several functions. They should maintain connectivity for daily movement, travel, mate-seeking, and migration; plant propagation; genetic interchange; population movement in response to environmental change or natural disaster; and recolonization of habitats subject to local extirpation.

The suitability of a habitat as a wildlife movement corridor is related to, among other factors, the habitat corridor's dimensions (length and width), topography, vegetation, exposure to human influence, and the species in question (Beier and Loe 1992). Species utilize movement corridors in several ways. "Passage species" are those species that use corridors as thru-ways between outlying habitats. The habitat requirements for passage species are generally less than those for corridor dwellers. Passage species use corridors for brief durations, such as for seasonal migrations or movement within a home range. As such, movement corridors do not necessarily have to meet any of the habitat requirements necessary for a passage species everyday survival. Large herbivores, such as deer and elk, and medium-to-large carnivores, such as coyotes, bobcats and mountain lions, are typically passage species. "Corridor dwellers" are those species that have limited dispersal capabilities – a category that includes most plants, insects, reptiles, amphibians, small mammals, and birds – and that use corridors for a greater length of time. As such, wildlife movement corridors must fulfill key habitat components specific to a species' life history requirements in order for them to survive (Beier and Loe 1992). In general, however, the suitability and/or utility of the landscape – specifically, of the landscape as corridor habitat – is best evaluated on a species-level (Beier and Noss 1998).

Wildlife use of the survey area is likely limited given the location of the site. Although San Bruno Mountain Park is located approximately 0.25 miles to the west, manmade features including roads, property fence lines, and residential properties span between the park and the survey area creating barriers for wildlife dispersal. Furthermore, the survey area is adjacent to higher density residential,

commercial and industrial buildings as well as a well-traveled highway, Bayshore Boulevard, just east. Limited connectivity to the nearby park and a lack of habitat surrounding the survey area discourage its use as a movement corridor or wildlife habitat. An absence of hydrologic features further limits the property's value as suitable habitat given the resulting lack of aquatic species, riparian habitat, and drinking water sources for terrestrial wildlife.

Species typical of disturbed oak woodland and urban mix habitat may occur in the survey area. Wildlife species that utilize the project area likely change throughout the year and would depend on many different factors including food availability, presence of predators (i.e. house cats), and migration patterns. Wildlife species observed within the survey area or flying overhead during the field reconnaissance survey in February 2017 include: western scrub jay (*Aphelocoma californica*), northern mockingbird (*Mimus polyglottos*), turkey vulture (*Cathartes aura*), and American crow (*Corvus brachyrhynchos)*. Common native and non-native mammals such as striped skunk (*Mephitis mephitis*), opossum (*Didelphis virginiana*), and northern racoon (*Procyon lotor*) may forage or seek cover within the survey area. Downed logs and leaf litter in the survey area may provide habitat to common amphibians such as the Sierran treefrog (*Pseudacris regilla*) and arboreal salamander (*Aneides lugubris*).

No significant impacts on wildlife habitat or movement corridors are anticipated given the relatively low habitat values of the site, the surrounding development in the vicinity of the project, and that the survey area will still be available for common wildlife to move through during and after project construction. Common ground-mobile species such as eastern fox squirrel, striped skunk, and mule deer should be able to leave the project site on their own once work starts and therefore should not be impacted during construction. There is a chance that less mobile, leaf litter species such as Sierran treefrog or arboreal salamander could be impacted during construction but these species are relatively abundant, and their individual loss would not be considered significant.

Connectivity Features
There were no observed or documented connectivity features within or adjacent to the survey area.

Section 4. IMPACT ASSESSMENT

4.1. SUFFICIENCY OF BIOLOGICAL DATA

Sufficient information was obtained during the preparation of the Biological Assessment to recommend CEQA findings. Therefore additional plant and wildlife surveys are not warranted.

4.2. IMPACTS AND PROJECT CONDITIONS OF APPROVAL

4.2.1 IMPACTS

4.2.1.1 PLANT IMPACTS

The project will not have either direct or indirect impacts on special status plant species. Where feasible, the twelve noxious weeds identified above should be removed from the project areas to improve habitat and reduce the chance these species infesting surrounding natural areas.

4.2.1.2 WILDLIFE IMPACTS

Migratory Birds

If these species were nesting within the project area, the project could result in short-term impacts such as failure to breed, nest abandonment, reduced fecundity and decreased survivorship from noise and movement of personnel and equipment that exceeds normal background conditions within the survey area. Disturbance may alter the bird's behavior in ways that result in injury, mortality and reduced foraging success, such as the temporary loss of habitat due to avoidance of areas that have suitable habitat but intolerable levels of disturbance, and altered activity patterns.

Bird species that would be found nesting in the survey area are species typical of suburban habitats that require vegetation to nest and can tolerate some human activity. An abundance of similar habitat will still be available in the vicinity of the project area after the project is constructed; therefore construction of the project will have a less than significant impact to nesting birds.

The project conditions of approval listed in Section 4.2.2 will avoid any potential effects to Cooper's hawk and all migratory birds during project activities and reflect regulatory requirements under existing Federal law (The Migratory Bird Act). These measures include avoiding work during nesting season (CA1), nesting bird surveys (CA2), and implementation of non-disturbance buffers around active nests (CA3).

Roosting Bats

Direct and indirect effects to roosting bats, including the hoary bat and fringed myotis could occur based on the presence of suitable habitat within the mature trees and structures in the survey area. Bat species that could be found roosting in the area can tolerate suburban habitats and some human activity. There is an abundance of similar roosting habitat surrounding the property that will be available to roosting bats during and after the project; therefore construction of the project will have a less than significant effect on roosting bat species. The project condition of approval CA4 listed below will avoid or minimize any potential effects to roosting bats during project activities. The condition includes a survey of suitable bat habitat and avoidance of active roosts (CA4), and bat exclusion outside of maternity season, if necessary (CA5). In the event any active bat roosts are observed they will be avoided and additional coordination with CDFW shall be required.

4.2.2 CONDITIONS OF APPROVAL

Species **Project: N; Cumulative: N**

Special Status Plant Species

Significance Finding – Project Impacts: No Impact
Significance Finding – Cumulative Impacts: No Impact

No Special Status Plant Species were observed on site. The project will not cause project-specific or cumulative impacts to Special Status Plant Species. No conditions of approval are required.

Special Status Wildlife Species

Significance Finding – Project Impacts: Less Than Significant Impact
Significance Finding – Cumulative Impacts: Less Than Significant Impact

Special Status Wildlife Species were not observed on site. Therefore the following conditions of approval are required under existing Federal law and will avoid project-specific or cumulative impacts to Special Status Wildlife Species.

Conditions of Approval

CA1: Work Avoidance During Nesting Season
Purpose: To avoid impacts to nesting birds.
Requirement: If tree removal, structure removal, or ground disturbing activities are necessary, such activities shall be conducted outside of the nesting season (i.e., before Feb. 1 or after Aug. 31) to avoid impacts to nesting birds, if feasible. This condition shall be enforced unless there are other conditions or access issues that restrict timing of activities to the nesting bird season, making it infeasible to avoid the nesting season.
Documentation: N/A
Timing: September 1-January 31

CA2: Nesting Bird Surveys
Purpose: To avoid impacts to nesting birds.
Requirement: If project activities occur during the breeding season (approximately February 1 to August 31, depending on elevation), preconstruction surveys for nesting birds shall be conducted within the project footprint and a 500 or 100-foot buffer (for raptors/owls and passerines, respectively), by a qualified biologist no more than ten days prior to equipment or material staging, tree removal or surface-disturbing activities. The surveys will entail a variety of search techniques, as described by Martin and Geupel (1993). These include incidental flushing of an adult from the nest, watching parental behavior (e.g., carrying nest material or food), and systematically searching nesting substrates, and use of call-broadcasts. If no active nests are found within the buffer area, work activities may continue.
Documentation: Email submittal of results to the City of Brisbane with GPS data of all active nests.
Timing: February 1 – August 31
Monitoring and Reporting: Email submittal of results to the City of Brisbane with GPS data of all active nests
Mapped Information: Submit GPS point location information to the City of Brisbane of all active nests located.

CA3: Non-Disturbance Nest Buffers
Purpose: To avoid impacts to nesting birds.
Requirement: If work proceeds during breeding season, and a nesting bird survey prepared in compliance with CA2 above finds active nests (i.e., nests with eggs or young birds present) on the project site, work limits will be adjusted to provide a buffer sufficient to avoid disturbance to nesting birds based on the nest location, topography, cover, the nesting pair's tolerance to disturbance and the type/duration of potential disturbance. No work shall occur within the non-disturbance buffers until the young have fledged as determined by a qualified biologist. If a special-status species nest is detected, buffer size shall be determined in cooperation with CDFW and USFWS Migratory Bird Permit Office.[12] If buffers are established and it is determined that project activities are resulting in nest disturbance, work shall cease immediately and CDFW and USFWS Migratory Bird Permit Office shall be contacted for further guidance.
Documentation: Submittal of active nest GPS locations and recommended buffer size to CDFW and USFWS.
Timing: N/A

CA4: Survey of Suitable Bat Habitat
Purpose: To avoid impacts to roosting bats
Requirement: Suitable bat habitat includes structures, bridges, snags, and mature trees with broken limbs, exfoliating bark and cavities. The applicant will avoid disturbing these features to the extent feasible. If suitable bat habitat would be disturbed the site shall be surveyed by a qualified biologist The survey shall include a visual inspection of features within 100 feet of the project area for potential roosting features and sign of roosting bats no more than 3 days prior to disturbance of such features. The survey will also include a dusk emergence survey to see if individuals are observed emerging from roosts within the project area. If no sign of bats roosting is observed, work may proceed. If bats are detected during the survey or during work activities all work will stop in the immediate vicinity of the roost, CDFW will be contacted, and the following additional conditions shall be implemented in order to avoid impacts to special-status bats and their roosts (Johnston et al. 2004).

- Airspace access to and from the roost shall remain approximately the same.
- No work will occur and no materials will be staged within 100 ft. of the roost.

These are the minimum conditions to be implemented. Some bat species are highly sensitive to human disturbance and additional conditions may be required by the biologist and will be developed in coordination with CDFW.
Documentation: Email submittal of survey results to the City of Brisbane.
Timing: Avoid work during the maternity season (April-September) to the greatest extent practicable.

CA5: Bat Exclusion
Purpose: To avoid impacts to roosting bats
Requirement: If active roosts are detected during the survey of suitable bat habitat and any bat exclusion is required from the work area, the City of Brisbane will coordinate with CDFW. If eviction is necessary and approved by CDFW it should occur between October and March, to avoid maternity season. Exclusion is to be done selectively and only to the extent necessary to prevent morbidity or mortality in the colony.
Documentation: Email submittal of summary of exclusion and eviction activities to the City of Brisbane.

[12] 2800 Cottage Way, Sacramento, CA 95825; Phone: (916) 414-6464; email: *permitsR8MB@fws.gov*

Timing: October - March

Ecological Communities **Project: N; Cumulative: N**

Sensitive Plant Communities

Significance Finding – Project Impacts: No Impact
Significance Finding – Cumulative Impacts: No Impact

No Sensitive Plant Communities were observed on site. The project will not cause project-specific or cumulative impacts to Sensitive Plant Communities. No conditions of approval are required.

Waters and Wetlands

Significance Finding – Project Impacts: No Impact
Significance Finding – Cumulative Impacts: No Impact

No Waters or Wetlands were observed on site. The project will not cause project-specific or cumulative impacts to Waters or Wetlands. No conditions of approval are required.

Environmentally Sensitive Habitat Areas

Significance Finding – Project Impacts: No Impact
Significance Finding – Cumulative Impacts: No Impact

No Environmentally Sensitive Habitat Areas were observed on site. The project will not cause project-specific or cumulative impacts to Environmentally Sensitive Habitat Areas. No conditions of approval are required.

Habitat Connectivity (migration corridors) **Project: N; Cumulative: N**

Habitat Connectivity (Migration Corridors)

Significance Finding – Project Impacts: No Impact
Significance Finding – Cumulative Impacts: No Impact

No Habitat Connectivity (Migration Corridors) were observed on site. The project will not cause project-specific or cumulative impacts to Habitat Connectivity (Migration Corridors). No conditions of approval are required.

Section 5. PHOTOS

Photos	
Location 1093 San Bruno Avenue **Map Key** P1 **View Direction** West northwest **Description** Non-native ruderal vegetation including French broom (*Genista monspessulana**) characteristic of site.	
Location 1093 San Bruno Avenue **Map Key** P2 **View Direction** West **Description** Dilapidated structure on site with existing structure that is to be demolished in the background.	

Photos	
Location 1093 San Bruno Avenue **Map Key** P3 **View Direction** West southwest **Description** Existing structure with English ivy (*Hedera helix**), Cape ivy (*Delairea odorata*), and non-native ruderal vegetation.	
Location 1093 San Bruno Avenue **Map Key** P4 **View Direction** North **Description** Characteristic understory vegetation on site.	

Photos	
Location 1093 San Bruno Avenue **Map Key** P5 **View Direction** North **Description** non-native ruderal vegetation and existing unused structures on site.	
Location 1093 San Bruno Avenue **Map Key** P6 **View Direction** North northwest **Description** Existing structure on site surrounded by non-native ruderal plants.	

Section 6. REFERENCES

Baicich, P.J. and C.J.O. Harrison. 2005. *Nests, Eggs, and Nestlings of North American Birds*. *Second Edition*. Princeton University Press. Princeton, New Jersey. 347 pp.

Baldwin, B. G., D. H. Goldman, D. J. Keil, R. Patterson, T. J. Rosatti, and D. H. Wilken, editors. 2012. *The Jepson manual: vascular plants of California, second edition*. University of California Press, Berkeley.

Barclay, R. M. R. 1985. *Long-Versus Short-Range Foraging Strategies of Hoary (Lasiurus cinereus) and Silver-Haired (Lasionycteris noctivagans) Bats and the Consequences for Prey Selection*. Can. J. Zoo. 63(11):2507-2515.

Beier, P. and S. Loe. 1992. *A Checklist for Evaluating Impacts to Wildlife Movement Corridors*. Wildlife Society Bulletin 20(4):434-440.

Beier, P. and R.F. Noss. 1998. *Do Habitat Corridors Provide Connectivity?* Conservation Biology 12(6):1241-1252. December.

Bolster, B.C. 2017. *Hoary Bat (Lasiurus cinereus). Species Account*. Western Bat Working Group. http://wbwg.org/western-bat-species/.

Bulger, J.B., N.J. Scott Jr. and R. Seymour. 2003. *Terrestrial Activity and Conservation of Adult California Red-Legged Frogs Rana aurora draytonii in Coastal Forests and Grasslands*. Biological Conservation. Vol. 110: pp. 85-95.

The Calflora Database. 2017. *Information on Wild California Plants for Conservation, Education, and Appreciation*. http://www.calflora.org/.

California Department of Food and Agriculture (CDFA). 2017. *Noxious Weed Encycloweedia*. Accessed. http://www.cdfa.ca.gov/phpps/ipc/encycloweedia/encycloweedia_hp.html

California Department of Fish and Game. 2010. Vegetation Classification and Mapping Program List of California Vegetation Alliances. The Vegetation Classification and Mapping Program. Wildlife and Habitat Data Analysis Branch. September.

California Department of Fish and Wildlife (CDFW). 2016. Complete List of Amphibian, Reptile, Bird and Mammal Species in California. September. http://www.dfg.ca.gov/whdab/pdfs/species_list.pdf.

_____. 2017a. California Natural Diversity Database (CNDDB). Version 3.1.0. Database Query for the Point Bonita, San Francisco North, San Francisco South, Oakland West, Hunters Point, Montara Mountain, and San Mateo.

_____. 2017b. State and Federally Listed Endangered, Threatened and Rare Plants of California. California Natural Diversity Database. Habitat Conservation Division. Wildlife and Habitat Data Analysis Branch. April.

_____. 2017c. State and Federally Listed Endangered and Threatened Animals of California. California Natural Diversity Database. Biogeographic Data Branch. March.

_____. 2017d. Special Vascular Plants, Bryophytes and Lichens List. California Natural Diversity Database. Wildlife and Habitat Data Analysis Branch. April.

_____. 2017e. Special Animals. California Natural Diversity Database. Biogeographic Data Branch January.

California Invasive Plant Council (Cal-IPC). 2017. *California Invasive Plant Inventory*, online. Accessed. http://www.cal-ipc.org/paf/

California Native Plant Society (CNPS). 2001. *Inventory of Rare and Endangered Plants of California*. 6th Edition. Rare Plant Scientific Advisory Committee, David P. Tibor, Convening Editor. Sacramento, California. 388 pp.

_____. 2017. *Inventory of Rare and Endangered Plants* (online edition, v8). California Native Plant Society. Sacramento, CA. Accessed from http://rareplants.cnps.org/.

Brisbane Municipal Code (BMC). 2015. *A Codification of the General Ordinances of the City of Brisbane* – Chapter 2.12, Section .020, May 19, 2015. City of Brisbane.

Consortium of California Herbaria (CCH). 2017. Data provided by the participants of the Consortium of California Herbaria (ucjeps.berkeley.edu/consortium/).

Corelli, T., 2005. *Illustrated field guide to the woody plants of the Santa Cruz Mountains*. Monocot Press.

Cowardin, L.M., V. Carter, F.C. Golet and E.T. LaRoe. 1979. *Classification of Wetlands and Deepwater Habitats of the United States*. U.S. Department of the Interior, Fish and Wildlife Service, Washington, D.C. 131 pp.

Curtis, Odette E., R. N. Rosenfield and J. Bielefeldt. 2006. *Cooper's Hawk (Accipiter cooperii), The Birds of North America Online* (A. Poole, Ed.). Ithaca: Cornell Lab of Ornithology; Retrieved from the Birds of North America Online: http://bna.birds.cornell.edu/bna/species/075.

eBird. 2017. *Cornell Lab of Ornithology eBird Application*. Online. http://ebird.org/ebird/

Erickson, Gregg A., et al. 2002. Bat and Bridges Technical Bulletin (Hitchhiker Guide to Bat Roosts), California Department of Transportation, Sacramento CA.

Holland, R. 1986. *Preliminary Descriptions of the Terrestrial Natural Communities of California*. California Department of Fish and Game, The Resources Agency. 156 pp.

Holland, V.L. and D.J. Keil. 1995. *California Vegetation*. Kendall/Hunt Pub. Co. Dubuque, Iowa. 516 pp.

Johnston, D., Tatarian, D. G., and Pierson, E. 2004. California Bat Mitigation Techniques, solutions and effectiveness. Prepared by H. T. Harvey and Associates. Prepared for California Department of Transportation (Caltrans) Office of Biological Studies and Technical Assistance, Sacramento, CA 127 pp.

Jennings, M.R., and M.P. Hayes. 1994. *Amphibian and Reptile Species of Special Concern in California*. Final Report to the California Department of Fish and Game.

McClintock, E.M., Reeberg, P. and Knight, W., 1990. *Flora of the San Bruno Mountains*, San Mateo County, California.

National Oceanic and Atmospheric Administration (NOAA). 2004. *Endangered and Threatened Species; Establishment of Species of Concern List, Addition of Species to Species of Concern List, Description of Factors for Identifying Species of Concern, and Revision of Candidate Species List Under the Endangered Species Act*. National Marine Fisheries Service. Federal Register 50 CFR Part 226 Vol. 69(73):19975-19979. April 15.

_____. 2006. *Endangered and Threatened Species; Revision of Species of Concern List, Candidate Species Definition, and Candidate Species List*. 50 CFR Part 17 Vol. 71 (200): 61022-61025. October 17.

_____. 2017. *National Weather Service, San Francisco International Airport Station*. http://www.wrh.noaa.gov/.

PRISM. 2007. *103-Year High-Resolution Precipitation Climate Data Set for the Conterminous United States*. Oregon State University.

San Mateo County (SMC). 1977. *Regulation of the Removal and Trimming of Heritage Trees on Public and Private Property* – Ordinance No. 2427, April 5, 1977. County of San Mateo Planning and Building Division.

Sawyer, J.O., T. Keeler-Wolf, and J.M. Evens. 2009. *A Manual of California Vegetation*. Second edition. California Native Plant Society, Sacramento. 1300 pp.

Shuford, W.D. and T.G. Gardali. Eds. 2008. *California Bird Species of Special Concern. A Ranked Assessment of Species, Subspecies, and Distinct Populations of Birds of Immediate Conservation Concern in California*. Studies of Western Birds No. 1. Western Field Ornithologists and California Department of Fish and Game. 450 pp.

Stebbins, R. C. 2003. *A Field Guide to Western Reptiles and Amphibians*. 3rd Edition. Houghton Mifflin Company. New York, New York. 533 pp.

Thomas, J.H., 1961. *Flora of the Santa Cruz Mountains of California: a manual of the vascular plants*. Stanford University Press

Thomas Reid Associates (TRA). 1982. *San Bruno Mountain Habitat Conservation Plan – Volumes I and II*. San Bruno Mountain Habitat Conservation Plan Steering Committee Chaired by the County of San Mateo.

_____. 2003. *San Bruno Mountain Habitat Conservation Plan – Mission Blue and Callippe Silverspot Butterfly Habitat Restoration Guidelines*. San Mateo County Parks Department.

_____. 2008. *San Mateo Mountain Habitat Management Plan 2008*. San Mateo County Parks Department.

U.S. Department of Agriculture (USDA). 1997. *Ecological Subregions of California, Section and Subsection Descriptions*. USDA, Forest Service Pacific Southwest Region. R5-EM-TP-005. September.

U.S. Fish and Wildlife Service (USFWS). 1998. *Recovery Plan for Serpentine Soil Species of the San Francisco Bay Area*. Portland, Oregon. 330+ pp.

_____. 1999. *Endangered and Threatened Wildlife and Plants*. 50 CFR 17.11 & 17.12. December 31.

_____. 2014. *Endangered and Threatened Wildlife and Plants; Review of Native Species That Are Candidates for Listing as Endangered or Threatened*; Annual Notice of Findings on Resubmitted Petitions; Annual Description of Progress on Listing Actions. December 5.

_____. 2017a. *Federal Endangered and Threatened Species that Occur in or may be Affected by Projects in San Mateo County*. IPAC website query: https://ecos.fws.gov/ipac/location/index.

_____. 2017b. *National Wetland Inventory for the San Francisco South Quadrangle*. National Wetlands Inventory website. U.S. Department of the Interior, Fish and Wildlife Service, St. Petersburg, FL. http://www.nwi.fws.gov.

Western Bat Working Group (WBWG). 2017. *Fringed Myotis specis account*. Online. http://wbwg.org/western-bat-species/.

APPENDIX A SUMMARY OF BIOLOGICAL RESOURCE REGULATIONS

Sensitive Status Species Regulations

Federally Protected Species

San Mateo County is home to several federally listed endangered and threatened plant and wildlife species. The U.S. Fish and Wildlife Service (USFWS) regulates the protection of federally listed endangered and threatened plant and wildlife species.

FE (Federally Endangered): A species that is in danger of extinction throughout all or a significant portion of its range.

FT (Federally Threatened): A species that is likely to become endangered in the foreseeable future.

FC (Federal Candidate): A species for which USFWS has sufficient information on its biological status and threats to propose it as endangered or threatened under the Endangered Species Act (ESA), but for which development of a proposed listing regulation is precluded by other higher priority listing activities.

FSC (Federal Species of Concern): A species under consideration for listing, for which there is insufficient information to support listing at this time. These species may or may not be listed in the future, and many of these species were formerly recognized as "Category-2 Candidate" species.

The USFWS requires permits for the "take" of any federally listed endangered or threatened species. "Take" is defined by the USFWS as "to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct; may include significant habitat modification or degradation if it kills or injures wildlife by significantly impairing essential behavioral patterns including breeding, feeding, or sheltering."

The Endangered Species Act (ESA) does not provide statutory protection for candidate species or species of concern, but USFWS encourages conservation efforts to protect these species. USFWS can set up voluntary Candidate Conservation Agreements and Assurances, which provide non-Federal landowners (public and private) with the assurance that if they implement various conservation activities to protect a given candidate species, they will not be subject to additional restrictions if the species becomes listed under the ESA.

State Protected Species

The California Department of Fish and Game (CDFG) regulates the protection of endangered, threatened, and fully protected species listed under the California Endangered Species Act. Some species may be jointly listed under the State and Federal Endangered Species Acts.

SE (California Endangered): A native species or subspecies which is in serious danger of becoming extinct throughout all, or a significant portion, of its range due to one or more causes, including loss of habitat, change in habitat, overexploitation, predation, competition, or disease.

ST (California Threatened): A native species or subspecies that, although not presently threatened with extinction, is likely to become an endangered species in the foreseeable future in the absence of the special protection and management efforts required by this chapter. Any animal determined by the commission as "rare" on or before January 1, 1985, is a "threatened species."

SFP (California Fully Protected Species): This designation originated from the State's initial effort in the 1960's to identify and provide additional protection to those animals that were rare or faced possible extinction. Lists were created for fish, mammals, amphibians, reptiles, and birds. Most fully protected species have also been listed as threatened or endangered species under the more recent endangered species laws and regulations.

SR (California Rare): A species, subspecies, or variety of plant is rare under the Native Plant Protection Act when, although not presently threatened with extinction, it is in such small numbers throughout its range that it may become endangered if its present environment worsens. Animals are no longer listed as rare; all animals listed as rare before 1985 have been listed as threatened.

SSC (California Species of Special Concern): Animals that are not listed under the California Endangered Species Act, but which nonetheless 1) are declining at a rate that could result in listing, or 2) historically occurred in low numbers and known threats to their persistence currently exist.

The CDFG requires permits for the "take" of any State-listed endangered or threatened species. Section 2080 of the Fish and Game Code prohibits "take" of any species that the California Fish and Game Commission determines to be endangered or threatened. "Take" is defined in Section 86 of the Fish and Game Code as "hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill."

The California Native Plant Protection Act protects endangered and rare plants of California. Section 1908, which regulates plants listed under this act, states: "no person shall import into this state, or take, possess, or sell within this state, except as incident to the possession or sale of the real property on which the plant is growing, any native plant, or any part or product thereof, that the commission determines to be an endangered native plant or rare native plant, except as otherwise provided in this chapter."

Unlike endangered, threatened, and rare species, for which a take permit may be issued, California Fully Protected species may not be taken or possessed at any time and no licenses or permits may be issued for their take except for collecting these species for necessary scientific research and relocation of the bird species for the protection of livestock.

The California Endangered Species Act does not provide statutory protection for California species of special concern, but they should be considered during the environmental review process.

California Rare Plant Ranks (RPR)

Plants with 1A, 1B, 2 or 4 should always be addressed in CEQA documents. Plants with a RPR 3 do not need to be addressed in CEQA documents unless there is sufficient information to demonstrate that a RPR 3 plant meets the criteria to be listed as a RPR 1, 2, or 4.

RPR 1A: Plants presumed to be extinct because they have not been seen or collected in the wild in California for many years. This list includes plants that are both presumed extinct in California, as well as those plants which are presumed extirpated in California. A plant is extinct in California if it no longer occurs in or outside of California. A plant that is extirpated from California has been eliminated from California, but may still occur elsewhere in its range.

RPR 1B: Plants that are rare throughout their range with the majority of them endemic to California. Most of the plants of List 1B have declined significantly over the last century.

RPR 2: Plants that are rare throughout their range in California, but are more common beyond the boundaries of California. List 2 recognizes the importance of protecting the geographic range of widespread species.

Plants identified as RPR 1A, 1B, and 2 meet the definitions of Sec. 1901, Chapter 10 (Native Plant Protection Act) or Secs. 2062 and 2067 (California Endangered Species Act) of the California Department of Fish and Game Code, and are eligible for state listing.

RPR 3: A review list for plants for which there is inadequate information to assign them to one of the other lists or to reject them.

RPR 4: A watch list for plants that are of limited distribution in California.

Global and Subnational Rankings

Though not associated directly with legal protections, species have been given a conservation status rank by NatureServe, an international non-profit conservation organization that is the leading source for information about rare and endangered species and threatened ecosystems. The Ventura County Planning Division considers the following ranks as sensitive for the purposes of CEQA impact assessment (G = Global, S = Subnational or State):

G1 or S1 - Critically Imperiled

G2 or S2 – Imperiled

G3 or S3 - Vulnerable to extirpation or extinction

Migratory Bird Regulations

The Federal Migratory Bird Treaty Act (MBTA) and the California Department of Fish and Game (CDFG) Code (3503, 3503.5, 3511, 3513 and 3800) protect most native birds. In addition, the federal and state endangered species acts protect some bird species listed as threatened or endangered. Project-related impacts to birds protected by these regulations would normally occur during the breeding season, because unlike adult birds, eggs and chicks are unable to escape impacts.

The MBTA implements various treaties and conventions between the U.S. and Canada, Japan, Mexico, and Russia for the protection of migratory birds, which occur in two of these countries over the course of one year. The Act maintains that it is unlawful to pursue, hunt, take, capture or kill; attempt to take, capture or kill; possess, offer to or sell, barter, purchase, deliver or cause to be shipped, exported, imported, transported, carried or received any migratory bird, part, nest, egg or product, manufactured or not. Bird species protected under the provisions of the MBTA are identified by the List of Migratory Birds (Title 50 of the Code of Federal Regulations, Section 10.13 as updated by the 1983 American Ornithologists' Union (AOU) Checklist and published supplements through 1995 by the USFWS).

CDFG Code 3513 upholds the MBTA by prohibiting any take or possession of birds that are designated by the MBTA as migratory nongame birds except as allowed by federal rules and regulations promulgated pursuant to the MBTA. In addition, there are CDFG Codes (3503, 3503.5, 3511, and 3800) which further protect nesting birds and their parts, including passerine birds, raptors, and state "fully protected" birds.

NOTE: These regulations protect almost all *native nesting birds*, not just sensitive status birds.

Plant Community Regulations

Plant communities are provided legal protection when they provide habitat for protected species or when the community is in the coastal zone and qualifies as environmentally sensitive habitat area (ESHA).

Global and Subnational Rankings

Though not associated directly with legal protections, plant communities have been given a conservation status rank by NatureServe, an international non-profit conservation organization that is the leading source for information about rare and endangered species and threatened ecosystems. The Ventura County Planning Division considers the following ranks as sensitive for the purposes of CEQA impact assessment (G = Global, S = Subnational or State):

G1 or S1 - Critically Imperiled

G2 or S2 - Imperiled

G3 or S3 - Vulnerable to extirpation or extinction

CDFG Rare

Rare natural communities are those communities that are of highly limited distribution. These communities may or may not contain rare, threatened, or endangered species. Though the Native Plant Protection Act and the California Endangered Species Act provide no legal protection to plant communities, CDFG considers plant communities that are ranked G1-G3 or S1-S3 (as defined above) to be rare or sensitive, and therefore these plant communities should be addressed during CEQA review.

Environmentally Sensitive Habitat Areas

The Coastal Act specifically calls for protection of "environmentally sensitive habitat areas" or ESHA, which it defines as: "Any area in which plant or animal life or their habitats are either rare or especially valuable because of their special nature or role in an ecosystem and which could be easily disturbed or degraded by human activities and developments" (Section 30107.5).

California Environmental Quality Act (CEQA)

The California Environmental Quality Act of 1970 requires public agencies to evaluate the environmental implications of their actions, and to prevent environmental effects by avoiding or reducing significant impacts of their decisions, where feasible. CEQA was intended to assist public agencies in systematically identifying both the significant effects of proposed projects and the feasible alternatives or feasible mitigation measures which will avoid or substantially lessen such significant effects. In enacting CEQA, the Legislature expressed a policy that public agencies should not approve projects as proposed if there are such feasible alternatives or mitigation measures. Among its goals, CEQA was intended "to preserve for future generations representations of all plant and animal communities" (Cal. Pub. Res. Code §21001c). Through this process impacts and mitigation to state and federally listed plant species are discussed.-

The California Native Plant Society (CNPS) has developed and maintains an inventory of rare, Threatened and Endangered plants of California. This information is published in the Inventory of Rare and Endangered Vascular Plants of California. The inventory presents a ranking system for rare plants within the state known as California Rare Plant Ranks. The CNPS inventory is endorsed by the CDFW and effectively serves as its list of "candidate" plant species. The following identifies the definitions of the California Rare Plant Ranks:

- Rank 1A: Plants presumed to be extinct in California;
- Rank 1B: Plants that are rare, Threatened, or Endangered in California and elsewhere;
- Rank 2: Plants that are rare, Threatened, or Endangered in California, but are more numerous elsewhere;

- Rank 3: Plants about which more information is needed (a review list): and
- Rank 4: Plants of limited distribution (a watch list).

Rank 1B and 2 species are considered eligible for state listing as Endangered or Threatened pursuant to the California Fish and Game Code. As part of the CEQA process, such species should be fully considered, as they meet the definition of Threatened or Endangered under the NPPA and Sections 2062 and 2067 of the California Fish and Game Code. Rank 3 and 4 species are considered to be either plants about which more information is needed or are uncommon enough that their status should be regularly monitored. Such plants may be eligible or may become eligible for state listing, and CNPS and CDFW recommend that these species be evaluated for consideration during the preparation of CEQA documents (CNPS 2001), as some of these species may meet NPPA and CESA criteria as Threatened or Endangered.

In addition, CEQA requires that impacts to "resources that are rare or unique to that region" be evaluated [CEQA Guidelines 15125(c)]. This includes botanical resources that are, but not limited to, peripheral populations and disjunct subpopulations. These are informal terms that refer to those species that might be declining or be in need of concentrated conservation actions to prevent decline, but have no legal protection of their own. Also, CEQA Guidelines Section 15380 states "a species not included in any listing…shall nevertheless be considered to be rare or Endangered if the species is likely to become Endangered within the foreseeable future throughout all or a significant portion of its range and may be considered Threatened as that term is used in the ESA."

Waters and Wetlands Regulations

Numerous agencies control what can and cannot be done in or around streams and wetlands. If a project affects an area where water flows, ponds or is present even part of the year, it is likely to be regulated by one or more agencies. Many wetland or stream projects will require three main permits or approvals (in addition to CEQA compliance). These are:

•404 Permit (U.S. Army Corps of Engineers)

•401 Certification (California Regional Water Quality Control Board)

•Streambed Alteration Agreement (California Department of Fish and Game)

404 Permit (U.S. Army Corps of Engineers)

Most projects that involve streams or wetlands will require a 404 Permit from the U.S. Army Corps of Engineers (USACE). Section 404 of the federal Clean Water Act is the primary federal program regulating activities in wetlands. The Act regulates areas defined as "waters of the United States." This includes streams, wetlands in or next to streams, areas influenced by tides, navigable waters, lakes, reservoirs and other impoundments. For nontidal waters, USACE jurisdiction extends up to what is referred to as the "ordinary high water mark" as well as to the landward limits of adjacent Corps-defined wetlands, if present. The ordinary high water mark is an identifiable natural line visible on the bank of a stream or water body that shows the upper limit of typical stream flow or water level. The mark is made from the action of water on the streambank over the course of years.

Permit Triggers: A USACE 404 Permit is triggered by moving (discharging) or placing materials—such as dirt, rock, geotextiles, concrete or culverts—into or within USACE jurisdictional areas. This type of activity is also referred to as a "discharge of dredged or fill material."

401 Certification (Regional Water Quality Control Board)

If your project requires a USACE 404 Permit, then you will also need a Regional Water Quality Control Board (RWQCB) 401 Certification. The federal Clean Water Act, in Section 401, specifies that states must certify that any activity subject to a permit issued by a federal agency, such as the USACE, meets all state water quality standards. In California, the state and regional water boards are responsible for certification of activities subject to USACE Section 404 Permits.

Permit Trigger: A RWQCB 401 Certification is triggered whenever a USACE 404 Permit is required, or whenever an activity could cause a discharge of dredged or fill material into waters of the U.S. or wetlands.

Streambed Alteration Agreement (California Department of Fish and Game)

If your project includes alteration of the bed, banks or channel of a stream, or the adjacent riparian vegetation, then you may need a Streambed Alteration Agreement from the California Department of Fish and Game (CDFG). The California Fish and Game Code, Sections 1600-1616, regulates activities that would alter the flow, bed, banks, channel or associated riparian areas of a river, stream or lake. The law requires any person, state or local governmental agency or public utility to notify CDFG before beginning an activity that will substantially modify a river, stream or lake.

Permit Triggers: A Streambed Alteration Agreement (SAA) is triggered when a project involves altering a stream or disturbing riparian vegetation, including any of the following activities:

- Substantially obstructing or diverting the natural flow of a river, stream or lake
- Using any material from these areas
- Disposing of waste where it can move into these areas

Some projects that involve routine maintenance may qualify for long-term maintenance agreements from CDFG. Discuss this option with CDFG staff.

Locally Important Communities

The state passed legislation in 2001, the Oak Woodland Conservation Act, to emphasize that oak woodlands are a vital and threatened statewide resource. In response, the County of Ventura prepared and adopted an Oak Woodland Management Plan that recommended, among other things, amending the County's Initial Study Assessment Guidelines to include an explicit reference to oak woodlands as part of its definition of locally important communities. The Board of Supervisors approved this management plan and its recommendations.

APPENDIX B OBSERVED SPECIES TABLE

SPECIES NAME	COMMON NAME	NATIVE	NOTES
PLANTS			
Acacia melanoxylon	blackthorn acacia	No	
Aesculus californica	California buckeye	Yes	Individual plant present on site.
Cardamine oligosperma	bitercress	Yes	
Claytonia perfoliata	miner's lettuce	Yes	
Cortaderia sp.	pampas grass	No	
Cotoneaster sp.		No	
Crocosmia x *crocosmiiflora*	montbretia	No	
Delairea odorata	Cape ivy	No	
Ehrharta erecta	panic veldtgrass	No	
Eriobotrya japonica	loquat	No	
Erodium moschatum	white stemmed filaree	No	
Eucalyptus globulus	blue gun eucalyptus	No	
Euphorbia peplus	petty spurge	No	
Foeniculum vulgare	fennel	No	
Fumaria parviflora	fine leaved fumitory	No	
Genista monspessulana	French broom	No	
Geranium dissectum	cutleaf geranium	No	
Hedera helix	English ivy	No	
Heteromeles arbutifolia	toyon	Yes	
Malva sp.		---	
Nasturtium sp.		---	
Opuntia ficus-indica	mission cactus	No	
Oxalis pes-caprae	Bermuda buttercup	No	
Pentagramma triangularis	golden backed fern	Yes	
Plantago lanceolata	narrow leaved plantain	No	
Poa annua	annual blue grass	No	
Prunus dulcis	domestic almond	No	
Pseudotsuga menziesii	douglas fir	Yes	Individual plant present on site.
Pyracantha angustifolia	narrowleaf firethorn	No	
Quercus agrifolia	coast live oak	Yes	Individual plant present on site.
Rumex sp.	---	---	
Scrophularia californica	California bee plant	Yes	
Solanum sp.	---	---	

SPECIES NAME	COMMON NAME	NATIVE	NOTES
Toxicodendron diversilobum	poison oak	Yes	
Tropaeolum majus	garden nasturtium	No	
Vinca major	periwinkle	No	
ANIMALS			
BIRDS			
Aphelocoma californica	western scrub jay	Yes	
Cathartes aura	turkey vulture	Yes	
Corvus brachyrhynchos	American crow	Yes	
Mimus polyglottos	northern mockingbird	Yes	

ATTACHMENT A CNDDB LISTED SPECIES WITHIN 5 MILES OF PROJECT AREA

Scientific Name	Common Name	Species Status[1]
Plants		
Amsinckia lunaris	bent-flowered fiddleneck	CRPR 1B.1
Arctostaphylos imbricata	San Bruno manzanita	SE, CRPR 1B.1
Arctostaphylos montaraensis	Montara manzanita	CRPR 1B.2
Arctostaphylos pacifica	Pacific manzanita	SE, CRPR 1B.2
Chorizanthe cuspidata var. *cuspidata*	San Francisco Bay spineflower	CRPR 1B.2
Chorizanthe robusta var. *robusta*	robust spineflower	FE, CRPR 1B.1
Collinsia multicolor	San Francisco collinsia	CRPR 1B.2
Fritillaria liliacea	fragrant fritillary	CRPR 1B.2
Grindelia hirsutula ssp. *maritima*	San Francisco gumplant	CRPR 3.2
Helianthella castanea	Diablo helianthella	CRPR 1B.2
Hemizonia congesta ssp. *congesta*	congested-headed tarplant	CRPR 1B.2
Hesperevax sparsiflora var. *brevifolia*	short-leaved evax	CRPR 1B.2
Horkelia cuneate var. *sericea*	Kellog's horkelia	CRPR 1B.1
Horkelia marinensis	Point Reyes horkelia	CRPR 1B.2
Lessingia germanoru	San Francisco lessingia	FE, SE, CRPR 1B.1
Pentachaeta bellidiflora	white-rayed pentachaeta	FE, SE, CRPR 1B.1
Plagiobothrys chorisianus var. *chorisianus*	Choris' popcorn flower	CRPR 1B.2
Silene verecunda ssp. *verecunda*	San Francisco campion	CRPR 1B.2
Suaeda californica	California seablite	FE, CRPR 1B.1
Trifolium amoenum	two-fork clover	FE, CRPR 1B.1
Triphysaria floribunda	San Francisco owl's clover	CRPR 1B.2
Triquetrella californica	coastal triquetrella	CRPR 1B.2
Wildlife		
Amphibians		
Rana draytonii	California red-legged frog	FT, CH, SSC
Birds		
Accipiter cooperii	Cooper's hawk (nesting)	WL
Geothlypis trichas ssp. *sinuosa*	saltmarsh common yellowthroat	SSC, BCC
Melospiza melodia ssp. *pusillula*	Alameda song sparrow	SSC, BCC
Rallus obsoletus	Ridgway's rail	FE, SE, FP
Invertebrates		

Scientific Name	Common Name	Species Status[1]
Banksula incredula	Incredible harvestman	SA
Caecidotea tomalensis	Tomales isopod	SA
Callophrys mossii bayensis	San Bruno elfin butterfly	FE, CH, Xerces-CI
Dufourea stagei	Stage's dufourine bee	SA
Euphydryas editha bayensis	Bay checkerspot butterfly	FT, CH, Xerces-CI
Icaricia icarioides missionensis	Mission blue butterfly	FE, CH, Xerces-CI
Hydroporus leechi	Leech's skyline diving beetle	SA
Ischnura gemina	San Francisco forktail damselfly	SA
Speyeria callippe ssp. *callippe*	Callippe silverspot butterfly	FE, Xerces-CI
Reptiles		
Lasiurus cinereus	hoary bat	SA, WBWG-M
Myotis thysanodes	fringed myotis	WBWG-H
Reptiles		
Thamnophis sirtalis ssp. *tetrataenia*	San Francisco garter snake	FE, SE

Explanation of State and Federal Listing Codes

Federal listing codes:

- FE Federally listed as Endangered
- FT Federally listed as Threatened
- FPE Federally proposed for listing as Endangered
- FPT Federally proposed for listing as Threatened
- FPD Federally proposed for delisting
- FC Federal candidate species (former Category 1 candidates)
- SC Species of Concern (NMFS regulated species only)
- CH Critical Habitat (Proposed or Final) is designated
- SSC Species of Special Concern designated by the Marine Mammal Commission
- FSC Federal Species of Concern – No longer maintained by USFWS Sacramento Regional Office
- SLC Species of local concern or conservation importance – No longer maintained by USFWS

California listing codes:

- SE State listed as Endangered
- ST State listed as Threatened
- SCE State candidate for listing as Endangered
- SCT State candidate for listing as Threatened
- SCD State candidate for delisting
- SSC California Species of Special Concern
- FP Fully Protected
- WL Watch List

BCC U.S. Fish and Wildlife Service Birds of Conservation Concern. List of migratory and nonmigratory bird species (beyond those already designated as federally threatened or endangered) that represent the Service's highest conservation priorities.

SA "Special Animals" is a general term that refers to all of the taxa the CNDDB is interested in tracking, regardless of their legal or protection status. This list is also referred to as the list of "species at risk" or "special status species". The Department of Fish and Wildlife considers the taxa on this list to be those of greatest conservation need.

WBWG Western Bat Working Group: H – High Priority indicates species that are imperiled or are at high risk of imperilment based on available information on distribution, status, ecology and known threats; M – Medium Priority indicates a lack of information to assess the species' status; L – Low Priority indicates relatively stable populations based on available data. The WBWG also uses intermediary designations including MH – Medium-High and LM – Low-Medium priorities.

Xerces Xerces Society for Invertebrate Conservation. Red List identifies endangered, threatened or at-risk pollinator species. PE – Possibly Extinct indicates species only known from historical occurrences; CI – Critically Imperiled indicates species at very high risk of extinction; I – Imperiled indicates species at high risk of extinction; V – Vulnerable indicates species at moderate risk of extinction; DD – Data Deficient indicates lack of information to sufficiently assess status.

RPR 1B: Plants that are rare, Threatened, or Endangered in California and elsewhere;
2: Plants that are rare, Threatened, or Endangered in California, but are more numerous elsewhere;
4: Plants of limited distribution (a watch list).
.1: Seriously Endangered in California (over 80% of occurrences Threatened / high degree and immediacy of threat)
.2: Fairly Endangered in California (20-80% occurrences Threatened)
.3: Not very Endangered in California (<20% of occurrences Threatened or no current threats known)