APPENDIX 3.7-A: SPECIAL-STATUS SPECIES POTENTIALLY AFFECTED

Table 1 Special-Status Plant Species Considered for Project Effect Analysis

Scientific Name Common Name	Status Federal/State/ CRPR[1]	General Habitat Description (Wetland Indicator Status, if applicable)[2]	Bloom Period	Habitat Present or Absent in Project Footprint[4]
Acanthomintha duttonii San Mateo thorn-mint	FE/SE/1B.1	Serpentine soils in chaparral and valley and foothill grasslands; 50–300 m	Apr–June	**Absent.** Serpentine soils are not present.
Arctostaphylos franciscana Franciscan manzanita	FE/—/1B.1	Serpentine soils in coastal scrub; 60–300 m	Feb–Apr	**Absent.** Serpentine soils are not present.
Arctostaphylos montana ssp. *ravenii* Presidio manzanita	FE/SE/1B.1	Serpentine outcrops in coastal scrub, chaparral and coastal prairie; 45–215 m	Feb–Mar	**Absent.** Serpentine soils are not present.
Amsinckia lunaris Bent-flowered fiddleneck	—/—/1B.2	Coastal bluff scrub, valley and foothill grasslands, cismontane woodlands; 3–500 m	Mar–June	**Present.** Presence unlikely due to disturbed conditions of urban environment but grassland, coyote brush scrub, oak woodland, and mixed woodland habitat present.
Arenaria paludicola Marsh sandwort	FE/SE/1B.1	Sandy openings in freshwater or brackish marshes and swamps; 3–170 m (OBL)	May–Aug	**Absent.** Sandy soils are not present. Only known from San Luis Obispo County. No extant occurrences within 10 miles.
Astragalus pycnostachyus var. *pycnostachyus* Coastal marsh milkvetch	—/—/1B.2	Moist sites in coastal dunes, along streams in coastal salt marsh and swamps; below 30 m (OBL)	Apr–Oct	**Present.** Presence unlikely due to disturbed conditions of urban environment but coastal salt marsh habitat present in saline emergent wetlands at Brisbane Lagoon.
Astragalus tener var. *tener* Alkali milkvetch	—/—/1B.2	Playas, on adobe clay in valley and foothill grassland, vernal pools on alkaline soils; 1–60 m (FACW)	Mar–June	**Absent.** Adobe clay soils are not present.
Atriplex depressa Brittlescale	—/—/1B.2	Alkaline or clay soils in chenopod scrub, playas, valley and foothill grasslands; 1–320 m (FAC)	Apr–Oct	**Absent.** Alkaline or clay soils are not present.
Atriplex minuscula Lesser saltscale	—/—/1B.1	Sandy or alkaline soils in chenopod scrub, playas, valley and foothill grassland; 15–200 m (FACU)	May–Oct	**Absent.** Sandy or alkaline soils are not present.

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Blennosperma bakeri Sonoma sunshine	FE/SE/1B.1	Vernal pools; 10–110 m (OBL)	Mar–May	**Absent.** Vernal pools are not present. Species restricted to Sonoma County. No occurrences within 10 miles.
California macrophylla Round-leaved filaree	—/—/1B.1	Cismontane woodland, valley and foothill grassland on clay soils; 15–1,200 m	Mar–May	**Absent.** Clay soils are not present.
Calystegia purpurata ssp. *saxicola* Coastal bluff morning-glory	—/—/1B.2	Coastal dunes, coastal bluff scrub, coastal scrub, North Coast coniferous forest; 10–105 m	(Mar) Apr–Sept	**Absent.** Coastal dunes, coast bluff scrub, coastal scrub, and North Coast coniferous forest are not present. Species does not occur south of Marin County. No occurrences within 10 miles.
Carex comosa Bristly sedge	—/—/2B.1	Coastal prairie, marshes and swamps at lake margins, valley and foothill grassland; below 625 m (OBL)	May–Sept	**Present.** Freshwater emergent wetland habitat is present.
Carex praticola Northern meadow sedge	—/—/2B.2	Wet meadows and seeps below 3,200 m (FACW)	May–July	**Absent.** Wet meadows and seeps are not present.
Castilleja rubicundula var. *rubicundula* Pink creamsacs	—/—/1B.2	Serpentine soils in chaparral openings, cismontane woodland, meadows and seeps, and valley and foothill grassland; 20–910 m	Apr–June	**Absent.** Serpentine soils are not present.
Centromadia parryi ssp. *congdonii* Congdon's tarplant	—/—/1B.1	Alkaline soils in annual grassland, on lower slopes, flats, and swales, sometimes on saline soils; below 230 m (FACW)	May–Oct (Nov)	**Present.** Grassland habitat is present.
Centromadia parryi ssp. *parryi* Pappose tarplant	—/—/1B.2	Coastal prairie, meadows and seeps, coastal salt marshes and swamps, alkaline soils in vernally mesic valley and foothill grassland; 0–420 m (FACW)	May–Nov	**Present**. Presence unlikely due to disturbed conditions of urban environment but coastal salt marsh habitat present in saline emergent wetlands at Brisbane Lagoon.
Chloropyron maritimum ssp. *palustre* Point Reyes bird's-beak	—/—/1B.2	Coastal salt marsh; below 10 m (OBL)	June–Oct	**Present**. Presence unlikely due to disturbed conditions of urban environment but coastal salt marsh habitat present in saline emergent wetlands at Brisbane Lagoon.

Scientific Name Common Name	Status Federal/State/ CRPR[1]	General Habitat Description (Wetland Indicator Status, if applicable)[2]	Bloom Period	Habitat Present or Absent in Project Footprint[4]
Chorizanthe cuspidata var. *cuspidata* San Francisco Bay spineflower	—/—/1B.2	Sandy areas in coastal bluff scrub, coastal dunes, coastal prairie, and coastal scrub; 3–215 m	Apr–July (Aug)	**Absent**. Sandy soils are not present.
Chorizanthe robusta var. *robusta* Robust spineflower	FE/—/1B.1	Sandy or gravelly areas in coastal scrub, coastal dunes, and openings in cismontane woodland; 3–300 m	Apr–Sept	**Absent**. Sandy and gravelly soils are not present.
Chorizanthe valida Sonoma spineflower	FE/SE/1B.1	Sandy soils of coastal prairie; 10–305 m	June–Aug	**Absent**. Sandy soils are not present
Cirsium andrewsii Franciscan thistle	—/—/1B.2	Moist areas in broad-leaved upland forest, coastal prairie, coastal bluff scrub, coastal scrub, and mixed evergreen forest, sometimes on serpentine soils; below 150 m (FAC)	Mar–July	**Absent**. Broad-leaved upland forest, coastal prairie, coastal bluff scrub, coastal scrub, and mixed evergreen forest are not present. Only occurs in San Mateo and San Francisco Counties along the coast.
Cirsium fontinale var. *fontinale* Crystal Springs fountain thistle	FE/SE/1B.1	Serpentine seeps in chaparral, cismontane woodland, meadows and seeps, and valley and foothill grassland; 45–175 m (OBL)	(Apr) May–Oct	**Absent**. Serpentine seeps are not present.
Cirsium hydrophilum var. vaseyi *Mt. Tamalpais thistle*	—/—/1B.1	Serpentine seeps in chaparral, broad-leaved upland forest, meadows and seeps; 240–620 m (OBL)	May–Aug	**Absent**. Serpentine seeps are not present.
Cirsium occidentale var. *compactum* Compact cobwebby thistle	—/—/1B.2	Chaparral, coastal dunes, coastal prairie, coastal scrub; 5–150 m	Apr–June	**Absent**. Chaparral, coastal dunes, and coastal scrub are not present. Species does not occur north of San Luis Obispo County. No occurrences within 10 miles.
Cirsium praeteriens Lost thistle	—/—/1A	Habitat is unknown, not in Jepson Manual; below 100 m	June–July	**Absent**. Presumed extinct; known from only two collections from Palo Alto, most recently in 1901.

Scientific Name Common Name	Status Federal/State/ CRPR[1]	General Habitat Description (Wetland Indicator Status, if applicable)[2]	Bloom Period	Habitat Present or Absent in Project Footprint[4]
Clarkia franciscana Presidio clarkia	FE/SE/1B.1	Serpentine grassland, coastal scrub; 25–335 m	May–July	**Absent**. Serpentine soils are not present. Known from only two locations in Oakland and San Francisco and no occurrences within 10 miles. Serpentine soils are not present.
Collinsia corymbosa Round-headed Chinese-houses	—/—/1B.2	Coastal dunes; below 20 m	Apr–June	**Absent**. Coastal dunes are not present.
Collinsia multicolor San Francisco collinsia	—/—/1B.2	Closed-cone coniferous forest, coastal scrub, on decomposed shale (mudstone) mixed with humus; sometimes on serpentine soils; 30–250 m	Mar–May	**Absent**. Shale and serpentine soils are not present.
Eriogonum luteolum var. *caninum* Tiburon buckwheat	—/—/1B.2	On sandy to gravelly serpentine soils in chaparral, coastal prairie, cismontane woodland, valley and foothill grassland; below 700 m	May–Sept	**Absent**. Serpentine soils are not present.
Eryngium aristulatum var. *hooveri* Hoover's button-celery	—/—/1B.1	Vernal pools; 3–45 m (OBL)	July (Aug)	**Absent**. Vernal pools are not present.
Extriplex joaquinana *San Joaquin spearscale*	—/—/1B.2	Alkaline soils in chenopod scrub, meadows and seeps, playas, valley and foothill grassland; 1–835 m (FACU)	Apr–Oct	**Absent.** Alkaline soils are not present.
Fissidens pauperculus Minute pocket-moss	—/—/1B.2	Damp, coastal soil in North Coast coniferous forest; 10–1,024 m	N/A	**Absent**. North Coast coniferous forest is not present.
Fritillaria liliacea Fragrant fritillary	—/—/1B.2	Coastal prairie, cismontane woodland, coastal scrub, valley and foothill grassland, often on serpentine soils; 3–410 m	Feb–Apr	**Absent.** Serpentine soils are not present.
Gilia capitata ssp. *chamissonis* Blue coast gilia	—/—/1B.1	Coastal dunes, coastal scrub on sandy soils; 2–200 m	Apr–July	**Absent**. Sandy soils are not present.
Gilia capitata ssp. *tomentosa* Woolly-headed gilia	—/—/1B.1	Coastal bluff scrub; 10–220 m	May–July	**Absent**. Coastal bluff scrub is not present.

Scientific Name Common Name	Status Federal/State/ CRPR[1]	General Habitat Description (Wetland Indicator Status, if applicable)[2]	Bloom Period	Habitat Present or Absent in Project Footprint[4]
Gilia millefoliata Dark-eyed gilia	—/—/1B.2	Coastal dunes; 2–30 m	Apr–July	**Absent**. Coastal dunes are not present.
Grindelia hirsutula var. *maritima* San Francisco gumplant	—/—/3.2	Sandy or serpentine soils in coastal bluff scrub, coastal scrub, or valley and foothill grassland; 15–400 m (FACW)	Jun–Sept	**Absent**. Sandy soils and serpentine soils are not present.
Helianthella castanea Diablo helianthella	—/—/1B.2	Rocky, axonal soils in partial shade in broad-leaved upland forest, chaparral, cismontane woodland, coastal scrub, riparian woodland, valley and foothill grassland; 60–1300 m	Mar–Jun	**Absent**. Lowest elevational limit of occurrence above the maximum elevation in the Project Section.
Hemizonia congesta ssp. *congesta* Congested-headed hayfield tarplant	—/—/1B.2	Valley and foothill grassland, sometimes roadsides; 20–560 m	Apr–Nov	**Absent**. Species does not occur south of Marin County and no occurrences within 10 miles.
Hesperevax sparsiflora var. *brevifolia* Shortleaved evax	—/—/1B.2	Coastal dunes, coastal prairie, sandy soils in coastal bluff scrub; below 215 m (FACU)	Mar–June	**Absent**. Coastal dunes, coastal prairie, and coastal bluff scrub are not present.
Hesperolinon congestum Marin western flax	FT/ST/1B.1	Serpentinite chaparral, serpentinite grassland; 5–370 m	Apr–July	**Absent**. Serpentine soils are not present.
Heteranthera dubia Water star-grass	—/—/2B.2	Alkaline, still or slow-moving water of marshes and swamps; requires a pH of 7 or higher, usually in slightly eutrophic waters; 30–1,495 m (OBL)	July–Oct	**Absent**. Alkaline marshes and swamps are not present. Species does not occur in the San Francisco Bay Area.
Hoita strobilina Loma Prieta hoita	—/—/1B.1	On mesic, usually serpentinite, substrates in chaparral, cismontane woodland, and riparian woodland; 30–860 m (NL)	May–July (Aug–Oct)	**Absent**. Serpentine soils are not present.
Holocarpha macradenia Santa Cruz tarplant	FT/SE/1B.1	Coastal terrace grasslands, coastal scrub, often on light sandy to sandy clay soils; 10–220 m (NL)	June–Oct	**Absent**. Coastal terrace grasslands and coastal scrub habitat is not present. Species does not occur along the San Francisco Peninsula. No occurrences within 10 miles.

Scientific Name Common Name	Status Federal/State/ CRPR[1]	General Habitat Description (Wetland Indicator Status, if applicable)[2]	Bloom Period	Habitat Present or Absent in Project Footprint[4]
Horkelia cuneata var. *sericea* Kellogg's horkelia	—/—/1B.1	Openings in closed-cone coniferous forest, coastal scrub, maritime chaparral, on sandy or gravelly soils; 10–200 m (NL)	Apr–Sept	**Absent**. Sandy and gravelly soils are not present.
Horkelia marinensis Point Reyes horkelia	—/—/1B.2	Sandy soils in coastal dunes, coastal scrub, perennial grassland; 5–350 m (NL)	May–Sept	**Absent**. Sandy soils are not present.
Lasthenia californica ssp. *macrantha* Perennial goldfields	—/—/1B.2	Coastal bluff scrub, coastal dunes, coastal scrub; 5–520 m (FACU)	Jan–Nov	**Absent**. Coastal bluff scrub, coastal dunes, coastal scrub are not present. Occurs in San Mateo County along the immediate coast. Suitable habitat is not present.
Lasthenia conjugens Contra Costa goldfields	FE/—/1B.1	Vernal pools; below 470 m (FACW)	Mar–June	**Absent**. Vernal pools are not present.
Layia carnosa Beach layia	FE/SE/1B.1	Coastal dunes, coastal scrub on sandy soil; below 60 m	Mar–July	**Absent**. Sandy soils are not present.
Legenere limosa Legenere	—/—/1B.1	Vernal pools; below 880 m (OBL)	Apr–June	**Absent**. Vernal pools are not present.
Leptosiphon croceus Coast yellow leptosiphon	—/—/1B.1	Coastal bluff scrub and coastal prairie; 10–150 m	Apr–May	**Absent**. Coastal bluff scrub and coastal prairie are not present.
Leptosiphon rosaceus Rose leptosiphon	—/—/1B.1	Coastal bluff scrub; below 100 m	Apr–July	**Absent**. Coastal bluff scrub is not present
Lessingia germanorum San Francisco lessingia	FE/SE/1B.1	Coastal scrub, on remnant dunes; 25–110 m	(June) July–Nov	**Absent**. Remnant dunes are not present.
Lessingia hololeuca Woolly-headed lessingia	—/—/3	Clay or serpentinite soils of broad-leaved upland forest, coastal scrub, lower montane coniferous forest, valley and foothill grassland; 15–305 m	June–Oct	**Absent**. Clay and serpentine soils are not present.

Scientific Name Common Name	Status Federal/State/ CRPR[1]	General Habitat Description (Wetland Indicator Status, if applicable)[2]	Bloom Period	Habitat Present or Absent in Project Footprint[4]
Lilium maritimum Coast lily	—/—/1B.1	Broad-leaved upland forest, closed-cone pine-cypress forest, coastal prairie, coastal scrub, freshwater marshes and swamps, perennial grassland, North Coast coniferous forest, often in roadside ditches; 5–475 m (FACW)	May–Aug	**Absent**. Freshwater emergent marsh are present but this species does not occur south of Marin County and no occurrences within 10 miles.
Limnanthes douglasii ssp. *ornduffii* Ornduff's meadowfoam	—/—/1B.1	Agricultural fields, meadows and seeps; 10–20 m (OBL)	Nov–May	**Absent**. Agricultural fields, meadows, and seeps are not present.
Madia radiata Showy golden madia	—/—/1B.1	Oak woodland, valley and foothill grassland, slopes; 25–1,215 m	Mar–May	**Absent.** Oak woodland is present but species does not occur north of San Luis Obispo County.
Malacothamnus arcuatus Arcuate bush-mallow	—/—/1B.2	Chaparral, cismontane woodland on gravelly alluvium soil; 15–355 m	Apr–Sept	**Absent**. Gravelly alluvium soils are not present.
Malacothamnus hallii Hall's bush-mallow	—/—/1B.2	Chaparral and coastal scrub, sometimes on serpentine soils; 10–760 m	May–Sept (Oct)	**Absent**. Serpentine soils are not present. Species does not occur within 10 miles of the Project Section.
Microseris paludosa Marsh microseris	—/—/1B.2	Grassland, coastal scrub, closed-cone coniferous forest, cismontane woodland; 5–300 m	Apr–June (July)	**Absent**. Does not occur along the San Francisco Peninsula. Only occurrence in San Mateo County is along immediate, 10 miles to the west.
Monardella sinuata ssp. *nigrescens* Northern curly-leaved monardella	—/—/1B.2	Sandy substrates in chaparral, coastal dunes, coastal scrub, lower montane coniferous forest, ponderosa pine sandhills; below 300 m	Apr–Sept	**Absent**. Sandy soils are not present.
Navarretia leucocephala ssp. *bakeri* Baker's navarretia	—/—/1B.1	Mesic areas in cismontane woodland, lower montane coniferous forest, meadows and seeps, valley and foothill grassland, and vernal pools and swales; 5–1,740 m (OBL)	Apr–June	**Absent.** Suitable mesic area in cismontane woodland may be present, but species does not occur south of Marin County and no occurrences within 10 miles.
Navarretia myersii ssp. *myersii* Pincushion navarretia	—/—/1B.1	Edges of vernal pools; 20–330 m (OBL)	Apr–May	**Absent**. Vernal pools are not present.

Scientific Name Common Name	Status Federal/State/ CRPR[1]	General Habitat Description (Wetland Indicator Status, if applicable)[2]	Bloom Period	Habitat Present or Absent in Project Footprint[4]
Navarretia prostrata Prostrate vernal pool navarretia	—/—/1B.1	Vernal pools and mesic areas in coastal scrub and alkali grasslands; 15–1,210 m (OBL)	Apr–July	**Absent**. Vernal pools are not present.
Pentachaeta bellidiflora White-rayed pentachaeta	FE/SE/1B.1	Cismontane woodland and valley and foothill grassland, often on serpentine soils; 35–620 m	Mar–May	**Absent**. Serpentine soils are not present.
Piperia candida White-flowered rein orchid	—/—/1B.2	Broad-leaved upland forest, lower montane coniferous forest, North Coast coniferous forest, sometimes on serpentine soils; 30–1,310 m	(Mar) May–Sept	**Absent**. Serpentine soils are not present.
Plagiobothrys chorisianus var. *chorisianus* Choris' popcornflower	—/—/1B.2	Vernal pools and mesic sites in chaparral, coastal prairie, coastal scrub; 15–160 m (OBL)	Mar–June	**Absent**. Coastal scrub is not present
Plagiobothrys diffusus San Francisco popcornflower	—/SE/1B.1	Sparsely vegetated, mesic sites in coastal prairie or serpentine bunchgrass grasslands; 60–360 m	Mar–June	**Absent**. Coastal scrub and serpentine bunchgrass grassland are not present.
Plagiobothrys glaber Hairless popcornflower	—/—/1A	Alkaline meadows and seeps, coastal salt marsh and swamps; 15–180 m (OBL)	Mar–May	**Absent**. Presumed extinct. Last confirmed observation was in 1954.
Polemonium carneum Oregon polemonium	—/—/2B.2	Coastal prairie, coastal scrub, lower montane coniferous forest; 0–1,830 m	Apr–Sept	**Absent**. Coastal prairie, coastal scrub, and lower montane coniferous forest are not present. Species does not occur south of Marin County and not reported within 10 miles.
Potentilla hickmanii Hickman's cinquefoil	FE/SE/1B.1	Coastal bluff scrub, closed-cone coniferous forest, meadows and seeps (vernally mesic), and freshwater marshes and swamps; 10–149 m (FACW)	Apr–Aug	**Absent**. Freshwater emergent marsh is present but species is only known from two locations along the immediate coast; nearest is approximately 10 miles from the study area.
Polygonum marinense Marin knotweed	—/—/3.1	Coastal salt marsh, brackish marsh; below 10 m (OBL)	(Apr) May–Aug (Oct)	**Absent**. Coastal salt marsh is present but species does not occur south of Marin County and not reported within 10 miles.

Scientific Name Common Name	Status Federal/State/ CRPR[1]	General Habitat Description (Wetland Indicator Status, if applicable)[2]	Bloom Period	Habitat Present or Absent in Project Footprint[4]
Puccinellia simplex California alkali grass	—/—/1B.2	Alkaline, vernally mesic areas; sinks, flats, and lake margins in chenopod scrub, meadows and seeps, valley and foothill grasslands, and vernal pools; 2–930 m (FACW)	Mar–May	**Absent**. Alkaline soils are not present.
Sanicula maritima Adobe sanicle	FE/SR/1B.1	Clay or serpentine soils in chaparral, costal prairie, meadows and seeps, and valley and foothill grassland; 30–240 m	Feb–Mar	**Absent**. Clay and serpentine soils are not present.
Sidalcea calycosa ssp. *rhizomata* Point Reyes checkerbloom	—/—/1B.2	Freshwater wetlands near the coast, including marshes, swamps, and seeps; 3–75 m (OBL)	Apr–Sept	**Absent**. Freshwater emergent wetlands are present but species does not occur south of Marin County and not reported within 10 miles.
Silene verecunda ssp. *verecunda* San Francisco campion	—/—/1B.2	Sandy soils in coastal bluff scrub, chaparral, coastal prairie, coastal scrub, and valley and foothill grassland; 30–645 m	(Feb) March–Jun (Aug)	**Absent**. Sandy soils are not present.
Stebbinsoseris decipiens Santa Cruz microseris	—/—/1B.2	Broad-leaved upland forest, closed-cone coniferous forest, chaparral, valley and foothill grasslands, coastal prairie, coastal scrub, and open grassy areas in other habitat types, on serpentine, sandstone or shale derived soils; 10–500 m	Apr–May	**Absent**. Serpentine, sandstone and shale soils are not present. No occurrences reported with 10 miles. Restricted to Santa Cruz, Monterey, and Marin Counties.
Suaeda californica California seablite	FE/—/1B.1	Margins of tidal salt marsh; below 15 m (FACW)	July–Oct	**Present**. Presence unlikely due to disturbed conditions of urban environment but coastal salt marsh habitat present in saline emergent wetlands at Brisbane Lagoon.
Symphyotrichum lentum Suisun Marsh aster	—/—/1B.2	Brackish and freshwater marshes and swamps; below 3 m (OBL)	May–Nov	**Absent**. Brackish and freshwater marshes are present but species does not occur south of Contra Costa County. Not reported within 10 miles.
Trifolium amoenum Two-fork clover	FE/—/1B.1	Low elevation grasslands, including swales and disturbed areas, sometimes on serpentinite soils; 5–415 m (FACW)	Apr–June	**Absent**. Serpentine soils are not present. Species is only known from Marin and Sonoma Counties and no occurrences within 10 miles.

Scientific Name Common Name	Status Federal/State/ CRPR[1]	General Habitat Description (Wetland Indicator Status, if applicable)[2]	Bloom Period	Habitat Present or Absent in Project Footprint[4]
Trifolium hydrophilum Saline clover	—/—/1B.2	Mesic, alkaline areas in valley and foothill grassland, vernal pools, marshes and swamps; below 300 m (FAC)	Apr–June	**Present**. Presence unlikely due to disturbed conditions of urban environment but alkaline marsh habitat present in saline emergent wetlands at Brisbane Lagoon.
Triphysaria floribunda San Francisco owl's-clover	—/—/1B.2	Coastal prairie, coastal scrub, annual grassland, usually on serpentinite; 10–160 m	Apr–June	**Absent.** Serpentine soils are not present.
Triquetrella californica Coastal triquetrella	—/—/1B.2	On gravely or thin soil on outcrops in coastal bluff scrub and coastal scrub, usually within 10 miles of the coast; 10–100 m	N/A; moss	**Absent**. Rock outcrops are not present.
Tropidocarpum capparideum Caper-fruited tropidocarpum	—/—/1B.1	Grasslands on alkaline hills; below 455 m	Mar–Apr	**Absent**. Presumed extirpated from Santa Clara County. Only occurrence known from Fort Hunter Liggett.
Usnea longissima Methuselah's beard lichen	—/—/4.2	On tree branches; usually on old growth hardwoods and conifers in broad-leaved upland forest and coast coniferous forest; 50–1460 m	N/A	**Absent**. Old growth forests are not present.

Sources: CDFW 2018, CNPS 2018
m = meters
[1] Status Codes
— = No status designation
Federal
FD = Delisted. Status to be monitored for 5 years.
FE = Listed as endangered under the Endangered Species Act
FT = Listed as threatened under the Endangered Species Act
State
SE = Listed as endangered under the California Endangered Species Act
ST = Listed as threatened under the California Endangered Species Act
SR = Listed as rare under the California Native Plant Protection Act
SSC = California Species of Special Concern
California Rare Plant Ranks (CRPR)
LIST 1A = Presumed extinct in California
LIST 1B = Rare, threatened, or endangered in California and elsewhere
0.1: Seriously endangered in California
0.2: Fairly endangered in California
0.3: Not very endangered in California
LIST 2 = Rare, threatened, or endangered in California, but more common elsewhere
0.1: Seriously endangered in California
0.2: Fairly endangered in California
0.3: Not very endangered in California
LIST 3 = More information about this plant (Review List).
0.1: Seriously endangered in California
0.2: Fairly endangered in California
0.3: Not very endangered in California
[2] Wetland Indicator Status (Lichvar et al. 2012, 2014, 2016):
OBL = Obligate Wetland Plants—Almost always occur in wetlands.
FACW = Facultative Wetland Plants—Usually occur in wetlands, but may occur in nonwetlands.
FAC = Facultative Wetland Plants—Occur in wetlands and nonwetlands.
FACU = Facultative Upland Plants—Usually occur in nonwetlands, but may occur in wetlands.
UPL = Upland Plants—Almost never occur in wetlands.
[3] Project footprint plus a 100-foot buffer
[4] Species determined to be absent from the project footprint are unlikely to be affected by the project because suitable habitat is not present

Table 2 Special-Status Wildlife Species Considered for Project Effect Analysis

Common Name *Scientific Name*	Status Federal/ State [1]	Habitat	Habitat Present or Absent in /Project Footprint [3]
Invertebrates			
Bay checkerspot butterfly *Euphydryas editha bayensis*	FT (CH)/ –	Serpentine grassland in Santa Clara and San Mateo Counties. Primary host plant is native plantain (*Plantago erecta*) with two secondary host plants: purple owl's-clover (*Castilleja densiflora*) and exserted paintbrush (*Castilleja exserta*).	**Present.** Grassland on top of Icehouse Hill in Brisbane supports native grasses and larval host plant (*Plantago lanceolata*). Presence has not been confirmed but no surveys have been conducted. Known to occur on San Bruno Mountain, where they were reintroduced in 2017.
Callippe silverspot butterfly *Speyeria callippe callippe*	FE/–	Grassy hills surrounding San Francisco Bay that support Johnny-jump-up (*Viola pedunculata*), which is the larval host plant for this species. Two known populations located at San Bruno Mountain in South San Francisco and Cordelia Hills between Vallejo and Cordelia (Solano County).	**Present.** Grassland on top of Icehouse Hill in Brisbane supports native grasses and larval host plant (*Viola pedunculata*). Presence has not been confirmed but no surveys have been conducted. Known to occur on San Bruno Mountain (CDFW 2018; San Mateo County Parks Department 2016).
Mission blue butterfly *Plebejus icarioides missionensis*	FE/–	Coastal scrub, coastal chaparral, and coastal grassland. Found on hill and ridgetops, as well as south facing slopes. Host plants are perennial lupines (*Lupinus albifrons*, *L. variicolor*, and *L. formosus*).	**Present.** Grassland on top of Icehouse Hill in Brisbane supports native grasses and provides habitat for larval host plants (*Lupinus albifrons, L. formosus*). Presence of species or larval host plants has not been confirmed but focused surveys have not been conducted. Known to occur on San Bruno Mountain (CDFW 2018; San Mateo County Parks Department 2016).
Myrtle's silverspot butterfly *Speyeria zerene myrtleae*	FE/–	Coastal terrace prairie, coastal bluff scrub, and associated nonnative grassland habitats that support the larval host plant *Viola adunca* (western dog violet). Currently known from only three populations at Point Reyes National Seashore in Marin County, California.	**Absent.** Habitat study area[2] outside known range.
San Bruno elfin butterfly *Callophrys mossii bayensis*	FE/–	Coastal grassland and low scrub of north-facing slopes within the fog belt where the larval host plant (stonecrop; *Sedum spathulifolium*) grows. All known populations restricted to San Mateo County.	**Absent.** Known to occur on San Bruno Mountain (CDFW 2018; San Mateo County Parks Department 2016), but suitable rock outcrop habitat for larval host plant (*Sedum spathulifolium*) absent from Icehouse Hill.

Common Name *Scientific Name*	Status Federal/ State [1]	Habitat	Habitat Present or Absent in /Project Footprint [3]
Vernal pool fairy shrimp *Branchinecta lynchi*	FT (CH)/–	Found in vernal pools, small clear-water sandstone depression pools, and grassy swales within annual grasslands throughout the Central Valley and central and south Coast Ranges. Physical or biological features of critical habitat include topographic features characterized by mounds and swales and depressions within a matrix of surrounding uplands that result in continuously, or intermittently, flowing surface water connecting depressional features with underlying restrictive soil layers that become inundated by winter rains and continuously hold water for a minimum of 18 days; sources of food (e.g., single-celled bacteria, algae) in the pools; and structure in the pools consisting of organic and inorganic materials (e.g., living and dead plants, rocks) that provide shelter.	**Absent.** No known occurrences or habitat in habitat study area.
Vernal pool tadpole shrimp *Lepidurus packardi*	FT (CH)/–	Found in large vernal pools underlain by hardpan or in sandstone depressions; water in the vernal pools has very low alkalinity and conductivity. Physical or biological features of critical habitat include topographic features characterized by mounds and swales and depressions within a matrix of surrounding uplands that result in continuously, or intermittently, flowing surface water connecting depressional features with underlying restrictive soil layers that become inundated by winter rains and continuously hold water for a minimum of 18 days; sources of food (e.g., single-celled bacteria, algae) in the pools; and structure in the pools consisting of organic and inorganic materials (e.g., living and dead plants, rocks) that provide shelter.	**Absent.** No known occurrences or habitat in habitat study area.

Common Name *Scientific Name*	Status Federal/ State [1]	Habitat	Habitat Present or Absent in /Project Footprint [3]
Fish			
Chinook salmon – Central Valley Fall-Run ESU *Oncorhynchus tshawytscha*	–/SSC	Central Valley rivers and tributaries below impassable barriers. Adults enter rivers from San Francisco Estuary and move quickly to spawning grounds of cold, clear water with large gravel or cobble substrate. Peak spawning typically occurs October to November, but can continue through December and into January.	**Present.** Known to occur in the Guadalupe River (Smith 2013) in the San Jose Diridon Station Approach Subsection.
Delta smelt *Hypomesus transpacificus*	FT/SE	Shallow, open waters of the Sacramento–San Joaquin Delta estuaries. Species has been found as far upstream as the mouth of the American River on the Sacramento River and Mossdale on the San Joaquin River; range extends downstream to San Pablo Bay.	**Absent.** Habitat study area outside known range.
Green sturgeon (Southern Distinct Population Segment [DPS]) *Acipenser medirostris*	FT (CH)/SSC	Open waters of San Francisco Estuary, Sacramento-San Joaquin Delta, and Sacramento River. Adults spawn in cool sections of upper Sacramento River with deep, turbulent flows and hard substrates.	**Present.** Estuarine habitat present in tidal waters that overlap the project footprint (i.e., tidal channels under existing Caltrain bridges or within Caltrain right-of-way) at Visitacion Creek, Brisbane Lagoon/Guadalupe Valley Creek, Oyster Point Channel, and Colma Creek. Individuals straying from main migratory path between Golden Gate and Sacramento River may occasionally occur in these waters but regular occurrence unlikely.
Hardhead *Mylopharodon conocephalus*	–/SSC	Low- to mid-elevation streams in the main Sacramento and San Joaquin River drainages, also occurs in Russian River; prefers clear, deep pools and runs with slow velocities. Also occurs in reservoirs.	**Absent.** Species absent from San Francisco Bay streams except for Napa River (Moyle 2002: page 153).
Longfin smelt *Spirinchus thaleichthys*	C(T/E)/ ST/SSC	Adult life is spent in bays, estuaries, and nearshore coastal areas; adults migrate into freshwater rivers to spawn.	**Absent.** Individuals may occasionally occur in San Francisco Bay waters in habitat study area but such waters do not overlap with the project footprint.
Pacific lamprey *Entosphenus tridentatus*	–/SSC	In California, occurs along the coast and in coastal and estuarine streams from Los Angeles and Del Norte Counties and the rivers in the Central Valley. Upstream range limited by impassable barriers such as dams on major Central Valley rivers. Requires cold, clear water for spawning and incubation.	**Present.** Known to occur in accessible reaches below dams in the Coyote Creek and Guadalupe River watersheds (USFWS 2012). Modeled habitat present in Los Gatos Creek and Guadalupe River in the San Jose Diridon Station Approach Subsection.

Common Name *Scientific Name*	Status Federal/ State [1]	Habitat	Habitat Present or Absent in /Project Footprint [3]
Steelhead (Central California Coast DPS) *Oncorhynchus mykiss*	FT (CH)/–	Cold, clear water with clean gravel of appropriate size for spawning. Most spawning occurs in headwater streams. Steelhead migrate to the ocean to feed and grow until sexually mature.	**Present.** Watercourses with freshwater migration habitat crossing the project footprint include Mills Creek, San Mateo Creek, San Francisquito Creek, Stevens Creek, Los Gatos Creek, and Guadalupe River. Of these, only San Mateo, San Francisquito, and Los Gatos Creeks and the Guadalupe River are known to currently support a "definite" steelhead run or population (Leidy et al. 2005). Estuarine rearing habitat present in tidal waters that overlap the project footprint (i.e., tidal channels under existing Caltrain bridges or within Caltrain right-of-way) at Visitacion Creek, Brisbane Lagoon/Guadalupe Valley Creek, Oyster Point Channel, and Colma Creek.
Tidewater goby *Eucyclogobius newberryi*	FE (CH)/ SSC	At the bottom of lagoons, estuaries, and salt marshes with brackish, shallow water. In lower stream reaches where the water is still but not stagnant.	**Absent.** Extirpated from San Francisco Bay (Moyle 2002: page 431).
Reptiles and Amphibians			
Alameda whipsnake *Masticophis lateralis euryxanthus*	FT/ST	Valleys, foothills, and low mountains associated with northern coastal scrub or chaparral habitat restricted to Contra Costa and Alameda Counties, with some suitable habitat extending into a small portion of northern Santa Clara County and southwestern San Joaquin County. Requires rock outcrops and shrubs for cover and foraging.	**Absent.** Habitat study area outside known range.
California tiger salamander *Ambystoma californiense*	FT (CH)/ ST/SSC	Annual grasslands and grassy understory of valley-foothill hardwood habitats (e.g., oak savannah). Requires vernal pools or other seasonal water sources for breeding. Requires mammal burrows or other underground refuges.	**Absent.** Known to occur on Stanford University campus at Lake Lagunita (CDFW 2018) approximately 1.4 miles southwest of project footprint at Embarcadero Road in Palo Alto, but no known occurrences or breeding habitat in habitat study area due to dense urban development. Individuals from Stanford population not expected to disperse to project footprint due to intervening urban development and several roads.

Common Name *Scientific Name*	Status Federal/ State [1]	Habitat	Habitat Present or Absent in /Project Footprint [3]
California red-legged frog *Rana draytonii*	FT (CH)/ SSC	Marshes, slack-moving streams, ponds, with emergent vegetation, and typically without predatory fish; requires adequate hibernacula, such as small mammal burrows or moist leaf litter in or around aquatic habitat. Dispersal habitat consists of grassland, shublands, and woodlands between aquatic sites.	**Present.** Known to occur on SFO West-of-Bayshore property in San Bruno and Millbrae (CDFW 2018), including portions of Cupid Row and South Lomita Canal flood control channels within project footprint. Aquatic habitat includes constructed watercourses and freshwater emergent wetland in the project footprint between Angus Avenue in San Bruno and the Millbrae Station (i.e., SFO West-of-Bayshore) and several watercourses (see Table 3.7-4). Refugia/foraging habitat includes all non-urban cover types in the project footprint next to the SFO West-of-Bayshore property.
Foothill yellow-legged frog *Rana boylii*	–/SCT/SSC	Foothills of the Sierra Nevada and Coast Range. Occurs in rocky streams and rivers with rocky substrate and open, sunny banks, in forests, chaparral, and woodlands. Cobble-sized substrate required for egg laying.	**Absent.** Only extant occurrence within 10 miles is a 1973 observation in Alum Rock Park (Penitencia Creek) in the foothills east of downtown San Jose. Rocky streams with cobble substrate and open, sunny banks absent from project footprint.
Green sea turtle *Chelonia mydas*	FT/–	Tropical and subtropical marine waters with temperatures above 20 degrees Celsius. Nesting occurs at scattered locations throughout Pacific Ocean; no known nesting on U.S. West Coast.	**Absent.** Project footprint outside known range.
San Francisco garter snake *Thamnophis sirtalis tetrataenia*	FE/SE/FP	Freshwater marshes, ponds, and slow-moving sloughs and streams with emergent vegetation on the San Francisco peninsula. May overwinter in upland grasslands away from water.	**Present.** Known to occur on SFO West-of-Bayshore property in San Bruno and Millbrae (CDFW 2018), including portions of Cupid Row and South Lomita Canal flood control channels within project footprint. Aquatic habitat includes constructed watercourses and freshwater emergent wetland in the project footprint between Angus Avenue in San Bruno and the Millbrae Station. Refugia habitat includes all non-urban cover types in the project footprint in the same section.
Western pond turtle *Emys marmorata*	–/SSC	Ponds, marshes, rivers, streams, and irrigation ditches throughout the valley, foothills, and Coast Ranges of California. Needs basking sites, such as partially submerged logs or rocks, and suitable upland habit (sandy banks or grassy open fields) for egg laying. Fresh, brackish, or saltwater conditions.	**Present.** 33 occurrences within 10 miles of project footprint (CDFW 2018). Aquatic habitat includes constructed watercourses and freshwater emergent wetland in the project footprint between Angus Avenue in San Bruno and the Millbrae Station (i.e., SFO West-of-Bayshore) and several watercourses (see Table 3.7-4). Refugia/foraging habitat includes all non-urban cover types in the project footprint next to the SFO West-of-Bayshore property.

Common Name *Scientific Name*	Status Federal/ State [1]	Habitat	Habitat Present or Absent in /Project Footprint [3]
Birds			
Alameda song sparrow *Melospiza melodia pusillula*	–/SSC	Brackish and tidal marshes supporting cattails, tules, various sedges, and pickleweed.	**Present.** Tidal marsh nesting and foraging habitat present in saline emergent wetlands at Brisbane Lagoon.
American peregrine falcon *Falco peregrinus anatum*	--/FP	Found year-round within California range in a variety of habitats, mostly with cliffs for nesting and open areas for foraging. Uses large cities and nests on buildings.	**Absent.** Not expected to nest but likely to forage over Brisbane Lagoon and nearby Bay shoreline. Pair known to nest at San Jose City Hall (City of San Jose 2020) may occasionally venture into the habitat study area for the San Jose Diridon Station Approach Subsection to forage for rock pigeons but such occurrences are likely rare and short in duration.
Black skimmer *Rynchops niger*	–/SSC	Open, sandy beaches, on gravel or shell bars with sparse vegetation, or on mats of debris in saltmarsh.	**Absent (nesting).** Low-quality habitat present at shell bar at south end of Brisbane Lagoon (outside project footprint) but unlikely to nest due to easy access by terrestrial predators.
Burrowing owl *Athene cunicularia*	–/SSC	Year-round resident in lowlands throughout much of California. Migrants from other parts of western North America may augment resident populations in winter. Open, dry, annual or perennial grasslands, deserts, and scrublands characterized by low-growing vegetation. Uses small mammal burrows for nesting and winter refuge. May also use rock piles and culverts as roost sites.	**Present.** Wintering individual observed at north shore of Brisbane Lagoon on November 21, 2015 (Gray 2015) but no nesting occurrences north of Scott Boulevard. Modeled habitat in Brisbane (i.e., grassland, ruderal, and disturbed/barren land cover) unlikely to support nesting but California ground squirrel burrows and burrow surrogates (e.g., concrete debris or rock piles, culverts) may occasionally supporting wintering individuals. Modeled habitat in San Jose Diridon Station Approach Subsection due to presence of annual grassland near known nesting location at San Jose International Airport.
California black rail *Laterallus jamaicensis coturniculus*	–/ST,FP	San Francisco Estuary population associated with tidal salt marsh with dense pickleweed (*Salicornia* sp.); also occurs in brackish marshes of the Sacramento-San Joaquin Delta and isolated freshwater marshes of the Sierra foothills.	**Absent.** Tidal marsh at Brisbane Lagoon unsuitable due to its small size and isolation from known breeding populations. There are no known occurrences within 10 miles of Brisbane Lagoon, with the closest approximately 11.6 miles to the southeast at Belmont Slough, where the species was last detected in 1972. The closest recent occurrences is a February 2011 detection at Bair Island, approximately 14.2 miles to the southeast (CDFW 2018).

Common Name *Scientific Name*	Status Federal/ State [1]	Habitat	Habitat Present or Absent in /Project Footprint [3]
California least tern *Sternula antillarum brown*	FE/SE,FP	Historically nested on sandy beaches free of human disturbance, majority of current nest colony sites on developed lands or human-created islands near estuarine or nearshore oceanic foraging habitat.	**Absent.** No known nesting colonies in or near habitat study area.
California clapper (=Ridgway's) rail *Rallus obsoletus*	FE/SE,FP	Restricted to salt marshes and tidal sloughs around San Francisco Bay. Associated with heavy growth of pickleweed.	**Absent.** Tidal marsh at Brisbane Lagoon unsuitable due to its small size and isolation from known breeding populations. Annual region-wide surveys conducted on behalf of the Coastal Conservancy's Invasive *Spartina* Project detected this species at only one location on the San Francisco Peninsula: SFO. The remaining marsh fragments in this region, including Brisbane Lagoon, are too fragmented and too small to support sustainable breeding populations (California State Coastal Conservancy 2018).
Golden eagle *Aquila chrysaetos*	–/FP	Permanent resident and migrant throughout California range. Mountains and foothills. Nests on cliff edges or large trees in open areas. Needs open terrain for hunting: grasslands, deserts, savannahs, and early successional stages of forest and shrub habitats.	**Absent.** Nesting and foraging habitat absent from habitat study area.
Least Bell's vireo *Vireo bellii pusillus*	FE/SE	Summers within California range. Typically inhabits structurally diverse dense riparian woodlands/shrubs along watercourses or near open water. Nests in shrubs or low trees, usually about 3 feet aboveground, in horizontal or down-sloping twig fork, typically near edge of thicket. Obligate riparian species during breeding season. Brown-headed cowbird severe threat.	**Present (foraging only).** Riparian habitat along streams north of Scott Boulevard too small and sparsely vegetated for nesting by this species. An individual migrant was observed at Bedwell Bayfront Park in Menlo Park in May 2010 (Sullivan et al. 2009), approximately 2.5 miles north of the habitat study, but this species is otherwise unknown to occur on the San Francisco Peninsula. Individual migrants may occur in woodland within the habitat study area in the future, but such occurrences are expected to be very rare and short in duration. Modeled riparian habitat along Los Gatos Creek and the Guadalupe River in the San Jose Diridon Station Approach Subsection is considered "core recolonization habitat" in the Santa Clara Valley Habitat Plan but is not currently occupied by the species.

Common Name *Scientific Name*	Status Federal/ State [1]	Habitat	Habitat Present or Absent in /Project Footprint [3]
Loggerhead shrike *Lanius ludovicianus*	–/SSC	Year-round throughout most of California range; some breeding populations may be migratory. Wintering individuals augment resident populations and occupy areas where none breed. Breeds and forages in open habitats interspersed with shrubs and small trees, including disturbed habitats. Nests placed in trees.	**Absent.** No known nesting occurrences within 10 miles of project footprint. Wintering individuals may rarely visit open portions of habitat study area (e.g., Brisbane Lagoon, SFO West-of-Bayshore property) but nesting not expected due to urban environment.
Marbled murrelet *Brachyramphus marmoratus*	FT/SE	Mostly pelagic except when breeding. Nests in mature, old-growth forests in proximity to coastal water for foraging. Typically found in coastal redwood and Douglas-fir forests in California.	**Absent.** Old-growth coniferous forest near coast absent.
Northern harrier *Circus cyaneus*	–/SSC	Occurs year-round in breeding range in California and may potentially winter in areas statewide. Breeds and forages in variety of open (treeless) habitats such as marshes; meadows; pastures; prairies; weedy borders of lakes, rivers, and streams; grasslands; some croplands; sagebrush flats; and desert sinks. Constructs nests on ground in open field or meadow in shrubby vegetation, usually near wet areas.	**Absent.** Tidal marsh and grassland habitat at Brisbane Lagoon and SFO West-of-Bayshore property may support occasional foraging but nesting not expected due to urban environment.
Olive-sided flycatcher *Contopus cooperi*	–/SSC	Breeds in montane and northern coniferous forest, at edges and openings. Winters at forest edges and clearings with tall trees or snags.	**Absent.** Habitat absent from habitat study area.
Saltmarsh common yellowthroat *Geothlypis trichas sinuosa*	--/SSC	Freshwater marshes in summer and salt or brackish marshes in fall and winter in the San Francisco Bay area. Requires tall grasses, tules, and willow thickets for nesting and cover.	**Present.** Tidal marsh habitat present in saline emergent wetlands at Brisbane Lagoon and willow thicket habitat present in scrub/shrub wetlands at East Brisbane and West Brisbane LMF sites.
Short-eared owl *Asio flammeus*	–/SSC	Nests on ground within coastal and inland prairies, grasslands, meadows, marshes, and farmlands with abundant rodent populations.	**Absent.** Known to occur in large expanses of tidal marsh adjacent to San Francisco Bay but habitat absent from habitat study area (marsh at Brisbane Lagoon too small and isolated).
Short-tailed albatross *Phoebastria* (=*Diomedea*) *albatrus*	FE/–	Breeding limited to two remote islands in the western Pacific Ocean (Torishima and Senkaku Islands). Feed over continental shelf-break waters east of Honshu, Japan during breeding, and in shelf and shelf-break areas of the Bering Sea, Aleutian chain and in other Alaskan, Japanese, and Russian waters.	**Absent.** Project footprint outside species' known range.

Common Name *Scientific Name*	Status Federal/ State [1]	Habitat	Habitat Present or Absent in /Project Footprint [3]
Tricolored blackbird *Agelaius tricolor*	–/C(E)	Almost endemic to California; permanent resident and migrant. Highly colonial species, most numerous in Central Valley and vicinity. Nests next to open water, typically in freshwater marsh habitat where there is extensive emergent or riparian vegetation. Increasing percentage of breeding colonies has been reported in grain fields. Forages in grasslands, wetland habitats, and some agricultural areas.	**Present.** Marginal habitat present at SFO West-of-Bayshore property and along Guadalupe River but no known nest colonies on urbanized portion of San Francisco Peninsula or in downtown San Jose.
Western snowy plover *Charadrius alexandrinus nivosus*	FT* (CH)/ SSC	Occurs year-round in California range. Nests in loose colonies primarily along the coast in sand on beaches or in dry salt flats in lagoons. Limited inland nesting on flats at salt evaporation ponds and river bars. Feed primarily on terrestrial and aquatic invertebrates. *Federal listing applies only to the Pacific coastal population. SSC designation refers to both the coastal and interior populations.	**Absent.** No known occurrences or habitat in habitat study area.
White-tailed kite *Elanus leucurus*	–/FP	Lowland areas west of Sierra Nevada from the head of the Sacramento Valley south, including coastal valleys and foothills to the Mexico border. Low foothills or valley areas with valley or live oaks, riparian areas, and marshes near open grasslands for foraging. Nests in dense-topped trees or shrubs.	**Present.** Numerous eBird (Sullivan et al. 2009) occurrences in habitat study area, mostly outside nesting season. Saline emergent wetland and grassland suitable for foraging, trees and shrubs in mixed riparian, scrub/shrub wetland, coyote brush scrub, and ornamental woodland (e.g., scrub near Brisbane Lagoon) suitable for nesting.
Yellow-billed cuckoo *Coccyzus americanus occidentalis*	FT/SE	Breeds in large blocks of riparian habitats (particularly woodlands with willow and cottonwood) along the broad lower flood bottoms of larger river systems. Dense understory foliage important.	**Absent.** No occurrences within 10 miles of project footprint. Large blocks of mature riparian forest absent.
Yellow warbler *Setophaga petechia*	–/SSC	Riparian vegetation near water along streams and in wet meadows.	**Present.** Riparian habitat along streams north of Scott Boulevard too small and sparsely vegetated for nesting by this species but denser habitat along Los Gatos Creek and the Guadalupe River has low potential for nesting (confirmed in the vicinity of these locations during the Santa Clara County Breeding Bird Atlas [1987–2005] [Bousman 2007: pages 376–377]). This species is a common Bay Area migrant and has high potential to use woodlands within the habitat study area during spring (April–early June) and fall (late August–October) migration.

Common Name *Scientific Name*	Status Federal/ State [1]	Habitat	Habitat Present or Absent in /Project Footprint [3]
Mammals			
American badger *Taxidea taxus*	–/SSC	Throughout California in grasslands, savannas, and mountain meadows near timberline; requires friable soils and relatively open, uncultivated ground; requires suitable prey base of burrowing rodents such as gophers, ground squirrels, marmots, and kangaroo rats.	**Absent.** Six CNDDB occurrences within 10 miles of project footprint all historic; no extant occurrences or habitat in habitat study area.
Pallid bat *Antrozous pallidus*	–/SSC	Throughout California; forages in open areas of grasslands, shrublands, woodlands, and forests from sea level to 6,560 feet; roosts in caves, rock crevices, mines, hollow trees, buildings, and bridges.	**Present.** Could potentially roost under bridges at stream crossings in habitat study area.
Ringtail *Bassariscus astutus*	–/FP	Occurs throughout California in dry, rocky, or mountainous areas with scattered oaks and conifers as well as riparian communities; requires hollow trees, logs, cavities in rocky areas, or other recesses for cover and breeding.	**Present.** No known occurrences within 10 miles of habitat study area but species difficult to detect and therefore poorly represented in CNDDB. Modeled habitat limited to riparian vegetation along Los Gatos Creek and Guadalupe River in the San Jose Diridon Station Approach Subsection.
Salt-marsh harvest mouse *Reithrodontomys raviventris*	FE/SE,FP	Tidal salt marshes with a dense plant cover of pickleweed and fat hen along San Francisco, San Pablo, and Suisun Bays.	**Absent.** Tidal marsh at Brisbane Lagoon unsuitable due to small size, disturbed condition, and isolation from known populations to the south. The closest known occurrence to Brisbane Lagoon is a 1960 record between O'Neill Slough and US 101 in Foster City, approximately 11.8 miles to the southeast (CDFW 2018). Further south, it is known to occur at Bair and Greco Islands in Redwood City and the marshes of Palo Alto and Alviso in Santa Clara County (CDFW 2018).
Salt-marsh wandering shrew *Sorex vagrans halicoetes*	–/SSC	Small remnant stands of tidal salt marsh around the southern end of San Francisco Bay in San Mateo, Santa Clara, Alameda, and Contra Costa Counties. Require dense cover, abundant food (invertebrates), suitable nest sites (driftwood and other debris in the medium- to high-marsh zone), and continuous ground moisture.	**Absent.** Tidal marsh at Brisbane Lagoon outside subspecies' known distribution; also unsuitable due to small size, disturbed condition, and isolation from known occurrences to the south. The closest known occurrence to Brisbane Lagoon is a 1985 record at Bair Island in Redwood City, approximately 14 miles to the southeast (CDFW 2018).
San Francisco dusky-footed woodrat *Neotoma fuscipes annectens*	–/SSC	Wooded habitats in San Francisco south through Santa Clara County.	**Present.** May occur in riparian habitat along Los Gatos Creek and Guadalupe River.

Common Name *Scientific Name*	Status Federal/ State [1]	Habitat	Habitat Present or Absent in /Project Footprint [3]
Southern sea otter *Enhydra lutris nereis*	FT/–	Marine habitats between Half Moon Bay and Point Conception along the coast of central and southern California. Most individuals occur between the shore and the 65-foot depth contour.	**Absent.** Project footprint not located along coast; no marine habitat.
Townsend's big-eared bat *Corynorhinus townsendii*	–/C(T)/SSC	Variety of habitats throughout California, most commonly in mesic sites, including coniferous forests, mixed mesophytic forests, native prairies, riparian communities, active agricultural areas, and coastal areas. Typically roost in caves or cave-like features such as mines, buildings, bridges, and basal hollows in old-growth trees.	**Present.** Species sometimes roosts under bridges but typically in less disturbed landscape than that in habitat study area.
Western red bat *Lasiurus blossevillii*	–/SSC	Throughout California; roosts primarily in trees, typically adjacent to open fields or streams that are protected above and open below for foraging; prefers habitat edges and mosaics with trees.	**Present.** Could potentially roost in trees in mixed riparian, coyote brush scrub, and ornamental woodland adjacent to open areas or streams in habitat study area.

Sources: CDFW 2018; Creekside Science 2019
CNDDB = California Natural Diversity Database; LMF = light maintenance facility; m = meters; SFO = San Francisco International Airport; US = U.S. Highway
[1] Status
Federal
FE – listed as endangered under Endangered Species Act
FT – listed as threatened under Endangered Species Act
FC – Candidate for listing under Endangered Species Act
FPT – proposed for listing as threatened status under Endangered Species Act
(CH) – Critical Habitat designated by U.S. Fish and Wildlife Service
State
SE – listed as endangered under California Endangered Species Act
ST – listed as threatened under California Endangered Species Act
SCT – Candidate for listing as threatened under California Endangered Species Act
SSC – California Species of Special Concern
FP – Fully Protected Species under the California Fish and Game Code
[2] Project footprint plus 1,000-foot buffer
[3] Species determined to be absent from the project footprint are unlikely to be affected by the project because suitable habitat is not present

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