

APPENDIX D

Special Status Species

D.1 USFWS Species Memo



Memorandum

To: Dominique Kraft and Mary Nguyen, FTA Region 9

From: Hilda Lafebre, JPB

cc: Leo Tidd, WSP

Date: 10/22/2020

Re: DRAFT Guadalupe River Bridge Replacement Project- Section 7 Evaluation of USFWS Species

The purpose of this memorandum is to summarize the evaluation of federally listed species under the jurisdiction of the U.S. Fish and Wildlife Service (USFWS) for the Guadalupe River Bridge Replacement Project (the project). Fish species in the jurisdiction of the National Marine Fisheries Service are being address through a separate Section 7 informal consultation process. The USFWS species list (updated 10/22/2020) identified eight threatened, endangered, or candidate species potentially present in the study area (see **Attachment A**). The study area does not contain any USFWS designated Critical Habitat. As detailed further below, the study area does not provide suitable habitat for any of the eight species identified by USFWS. Therefore, the project will have *no effect* on USFWS species pursuant to the Endangered Species Act and consultation with USFWS is not required.

Study Area

The project spans the Guadalupe River approximately 1.6 miles upstream of the confluence with Los Gatos Creek and 8.5 miles upstream of the confluence with Alviso Slough in San Francisco Bay. The project study area consists of approximately 17 acres and includes the areas that could experience direct effects due to the project, as well as adjacent areas that could experience indirect effects (see **Figure 1**). The study area contains the following habitat types: developed land; aquatic (riverine); Fremont cottonwood forest; coast live oak woodland; wild oats and annual brome grassland; ornamental woodland; and a flood control basin that contains freshwater perennial marsh and seasonal wetlands. Field review of the study area habitats and a preliminary jurisdictional wetland/waters delineation occurred on December 12, 2018 and August 14, 2020.

Plant Species

One plant species was included on the USFWS species list, the threatened Robust spineflower. However, the species was not present in the biological resources field review and the study area lacks appropriate habitat to support this species.

Robust spineflower (*Chorizanthe robusta* var. *robusta*; federal Threatened)

Robust spineflower occurs in sandy or gravelly soils and is typically associated with chaparral, cismontane woodland, coastal dunes, or coastal scrub habitat.¹ The study area occurs within the floodplain of the

¹ California Native Plant Society, Rare Plant Program, 2019. Inventory of Rare and Endangered Plants of California (online edition, v8-03 0.39). Available at: <http://www.rareplants.cnps.org> [Accessed October 2019].

Guadalupe River in Santa Clara Valley in primarily alluvial soils and lacks chaparral, cismontane woodland, coastal dune, or coastal scrub habitat. In addition to lacking suitable habitat/soils in the study area, the Robust spineflower was not observed in the biological resources field review. Therefore, robust spineflower has no potential to occur within the study area. The only two occurrences recorded by the California Natural Diversity Database (CNDDDB) in Santa Clara County are considered “possibly extirpated”.² One documented occurrence is listed as “Exact location unknown, Mapped in general vicinity of San Jose.” The second is listed as “Exact location unknown. Mapped in general vicinity of Los Gatos, southwest of San Jose.”

Invertebrate Species

Two invertebrate species included on the USFWS species list, the threatened Bay checkerspot butterfly and endangered San Bruno elfin butterfly. However, the study area lacks appropriate habitat and is outside the range for both species.

Bay checkerspot butterfly (*Euphydryas editha bayensis*; federal Threatened)

The Bay checkerspot butterfly (BCB) is restricted to serpentine grassland that supports its larval host plants, dwarf plantain (*Plantago erecta*) or purple owl’s clover (*Castilleja exserta* spp. *exserta*).³ Remaining populations of BCB are located in the southernmost portions of Santa Clara County, in higher elevations outside the floodplain of the Guadalupe River. The study area is within the floodplain of the Guadalupe River, largely composed of alluvial soils that are heavily saturated and unable to support the host plant species for BCB.⁴ Serpentine soils are not present in the study area. In addition, the project site is well outside of the mapped historic and current range of BCB (**Figure 2**). Therefore, BCB has no potential to occur within the study area.

San Bruno elfin butterfly (*Callophrys mossii bayensis*; federal Endangered)

San Bruno elfin butterfly is restricted to coastal mountains adjacent to the San Francisco Bay —the remaining population occurs almost exclusively on San Bruno Mountain in northern San Mateo County.⁵ Its host plant is *Sedum spathulifolium*. The study area is in Santa Clara County, is approximately 39 miles southeast of San Bruno Mountain, is within the floodplain of the Guadalupe River, and the host plant is not present. Therefore, San Bruno elfin butterfly has no potential to occur within the study area.

Amphibian Species

Two amphibian species were included on the USFWS species list, the threatened California red-legged frog and the threatened California tiger salamander. However, neither species has potential to occur in

² California Department of Fish and Wildlife, 2019. California Natural Diversity Database. Available at: <https://apps.wildlife.ca.gov/rarefind/view/RareFind.aspx> [Accessed October 2019].

³ Xerces Society for Invertebrate Conservation, 2019. Checkerspots: bay checkerspot (*Euphydryas editha bayensis*). Available at: <https://xerces.org/bay-checkerspot/> [Accessed October 2019].

⁴ United States Department of Agriculture, Natural Resources Conservation Service, 2015. Supplement to the Soil Survey of the Santa Clara Area, California, Western Part. Available at: http://soils.usda.gov/survey/printed_surveys/ [Accessed October 2019].

⁵ Xerces Society for Invertebrate Conservation, 2019. Elfins: San Bruno elfin (*Callophrys mossii bayensis*). Available at: <https://xerces.org/san-bruno-elfin/> [Accessed October 2019].

the study area due to extensive urbanization in and around the study area and the substantial distance between the study area and known occurrences of these species.

California red-legged frog (*Rana draytonii*; federal Threatened)

In previous studies, the California red-legged frog (CRLF) was determined to be extirpated from the Santa Clara Valley and therefore has no potential to occur within the study area.⁶ This is due to extensive urbanization of the region, major disruption of the region's hydrology, and competition/predation from nonnative wildlife.³ In addition, the project is not within mapped CRLF breeding habitat in the Santa Clara Valley Habitat Plan. The project is approximately 8.5 miles from the nearest documented occurrences and approximately 3.5 miles from the mapped refugia or dispersal habitat (**Figure 3**).

California tiger salamander (*Ambystoma californiense*; federal Threatened)

California tiger salamander (CTS) is a grassland-obligate species, occurring most often in pond habitat complexes with extensive California ground squirrel (*Otospermophilus beecheyi*) and gopher (*Thomomys* spp.) burrow systems where it spends most of its life.⁸ In contrast, the study area does not contain suitable grassland habitat, contains a thick understory along the banks of Guadalupe River that would preclude CTS movement, and is isolated from occupied CTS habitat by extensive urbanization that has created a permanent migratory barrier to CTS. Like CRLF, CTS is likely extirpated from the Santa Clara Valley region due to extensive urbanization, major disruption of the region's hydrology, and competition/predation from nonnative wildlife.⁶ CTS therefore has no potential to occur within the study area.

In addition, the project is not within mapped breeding or non-breeding habitat for CTS in the Santa Clara Valley Habitat Plan and is approximately 2.5 miles from the nearest documented occurrence, though occurrences within this area are listed as "possibly extirpated" in the CNDDDB (**Figure 4**).

Fish Species

One fish was included on the USFWS species list, the threatened Delta smelt. However, the Delta smelt does not have the potential to occur in the study area because it is outside of the known range and is not a tidally influenced water.

Delta smelt (*Hypomesus transpacificus*; federal Threatened)

The study area is well outside of this species known range, which is limited to the northernmost portion of the San Francisco Bay and its confluence with the Sacramento Delta.⁷ Additionally, Delta smelt are restricted to waters with tidal influence and the study area contains a reach of the Guadalupe River that is entirely freshwater. The study area is approximately 8.5 miles inland from the tidally-influenced Alviso Slough at the Guadalupe River's confluence with San Francisco Bay. Delta smelt does not occur in the study area.

⁶ H. T. Harvey & Associates, 1997. Santa Clara Valley Water District California Red-legged Frog Distribution and status – 1997.

⁷ Santos, N. R., Katz, J. V. E., Moyle, P. B., and Viers, J. H., 2014. A programmable information system for management and analysis of aquatic species range data in California. Environmental Modelling & Software, Vol 53, pg 13-26. Available at: <https://pisces.ucdavis.edu/map> [Accessed October 2019].

Bird Species

Two bird species were included on the USFWS species list, the threatened California Ridgway's Rail and the threatened California least tern. The study area lacks appropriate tidal marsh habitat to support these species; therefore, neither species has potential to occur in the study area.

California Ridgway's (Clapper) Rail (*Rallus longirostris obsoletus* also *Rallus obsoletus*; federal Endangered)

The study area does not provide either foraging or nesting habitat for California Ridgway's rail (CRR). As described in Zeiner et al 1990⁸, clapper rails forage in higher marsh vegetation, along the mudflat interface, and along tidal creeks. The study area does not provide any of the described clapper rail foraging habitat. Additionally, reproduction is described in Zeiner et al as taking place in saline emergent wetlands, primarily along the lower zones with abundant cordgrass and in close proximity to tidal sloughs. The study area does not contain saline emergent wetlands, cordgrass, or tidal slough habitat, and is approximately 8.5 miles inland from the tidal influence of San Francisco Bay. All aquatic habitat in the study area is freshwater and unsuitable to CRR.

California least tern (*Sterna antillarum browni*; federal Endangered)

California least tern (CLT) is migratory, breeding in colonies in California in both Southern California and within the San Francisco Bay and likely wintering in South America.⁸ The study area does not provide either foraging or nesting habitat for this species. The California subspecies of the least tern, *S. antillarum browni*, prefers foraging near breeding colonies by diving for small fish. Breeding colonies are located on sandy soils with sparse vegetation near the ocean, lagoons, and bays.⁹ The study area is approximately 8.5 miles inland from the San Francisco Bay and aquatic habitat is entirely freshwater with abundant adjacent riparian vegetation, unlikely to support CLT. In addition, due to the state and federal listing status of CLT, the species is well-documented within California—the nearest documented CLT colony is approximately 20 miles northwest of the study area at Eden Landing Ecological Reserve in Union City, CA.⁹

List of Figures

Figure 1: Study Area Vegetative Communities

Figure 2: Blue Checkerspot Butterfly Map

Figure 3: California Red-Legged Frog Map

Figure 4: California Tiger Salamander Map

Attachments

Attachment 1: USFWS Species List

⁸ Zeiner, D.C., W.F.Laudenslayer, Jr., K.E. Mayer, and M. White, eds. 1988-1990. California's Wildlife. Vol. I-III. California Depart. of Fish and Game, Sacramento, California. Available at: <https://www.wildlife.ca.gov/Data/CWHR/Life-History-and-Range> [Accessed October 2019].

⁹ Frost, N., 2017. California least tern breeding survey, 2016 season. California Department of Fish and Wildlife, Wildlife Branch, Nongame Wildlife Program Report, 2017-03. Sacramento, CA. 20 pp + Appendices.

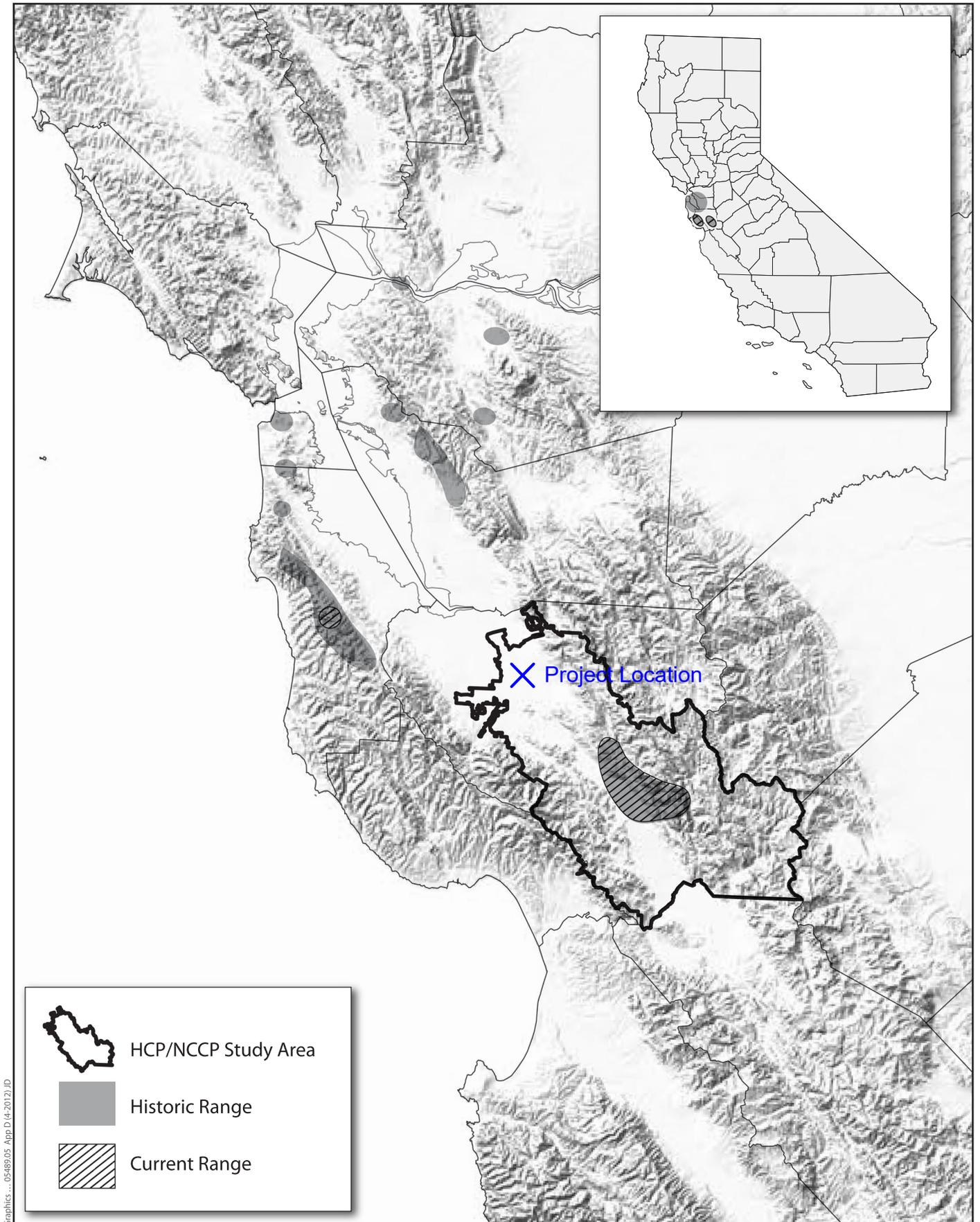


Source: ESRI, Google Earth, Louis Berger, MIG, SCVWD

- Study Area (17.06 acres)
- Freshwater Perennial Marsh (1.61 acres)
- Seasonal Wetland (1.33 acres)
- Aquatic Habitat (0.73 acres)
- Fremont Cottonwood Forest (2.13 acres)
- Coast Live Oak Woodland (0.38 acres)
- Wild Oats and Annual Brome Grassland (4.59 acres)
- Ornamental Woodland (1.25 acres)
- Developed Land (5.04 acres)



Figure 1 Vegetation Communities Map
Guadalupe River Bridge Replacement Project



Graphics ... 05489.05 App.D (4-2012).JD

Figure 2
Bay Checkerspot Butterfly (*Euphydryas editha bayensis*)
Distribution in California

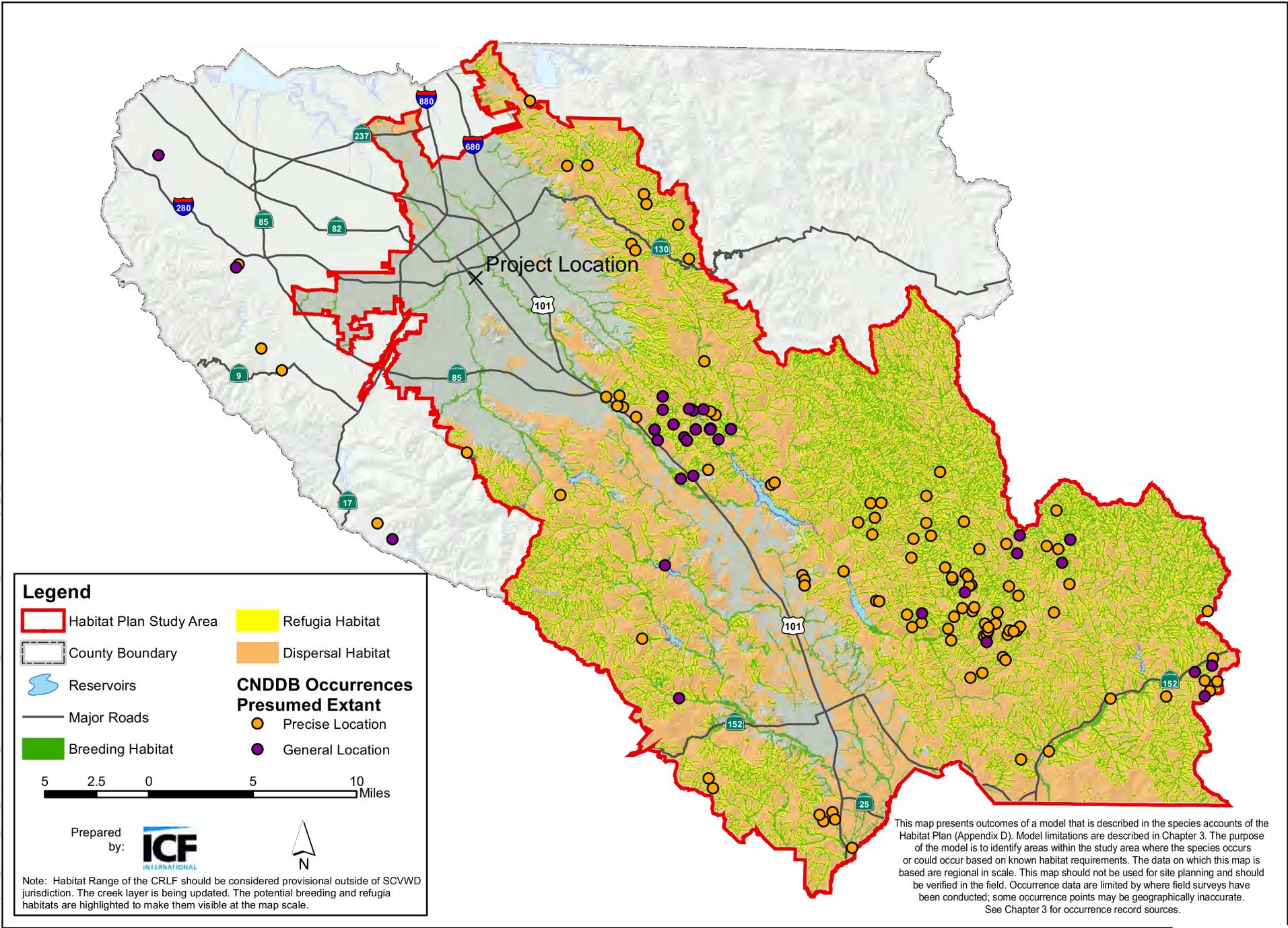


Figure 3

California Red-legged Frog Modeled Habitat Distribution - Santa Clara Valley Habitat Plan

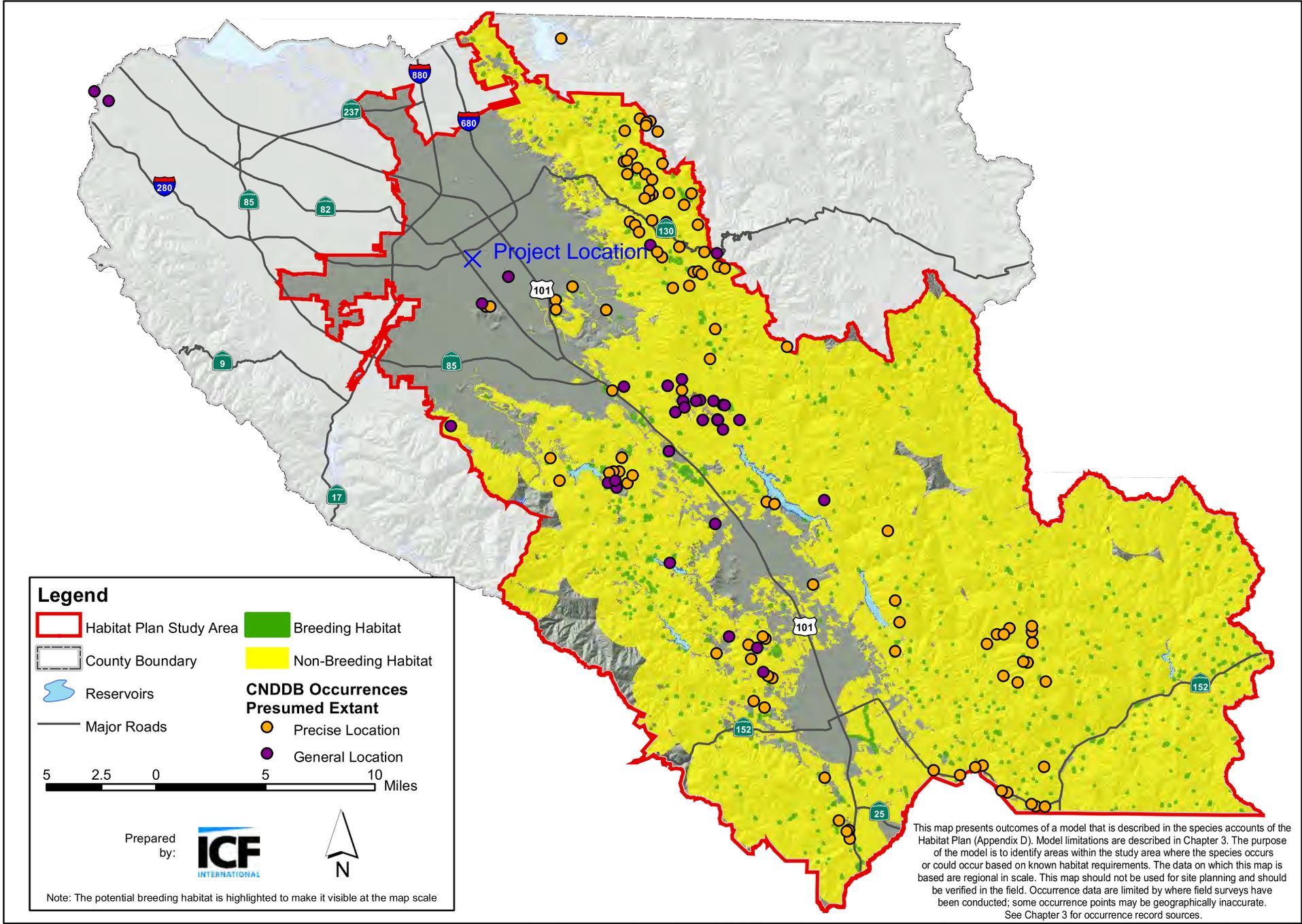


Figure 4
California Tiger Salamander Modeled Habitat Distribution - Santa Clara Valley Habitat Plan

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United States Department of the Interior



FISH AND WILDLIFE SERVICE
Sacramento Fish And Wildlife Office
Federal Building
2800 Cottage Way, Room W-2605
Sacramento, CA 95825-1846
Phone: (916) 414-6600 Fax: (916) 414-6713

In Reply Refer To:
Consultation Code: 08ESMF00-2019-SLI-3043
Event Code: 08ESMF00-2021-E-00476
Project Name: Guadalupe River Bridge Replacement

October 22, 2020

Subject: Updated list of threatened and endangered species that may occur in your proposed project location, and/or may be affected by your proposed project

To Whom It May Concern:

The enclosed species list identifies threatened, endangered, proposed and candidate species, as well as proposed and final designated critical habitat, under the jurisdiction of the U.S. Fish and Wildlife Service (Service) that may occur within the boundary of your proposed project and/or may be affected by your proposed project. The species list fulfills the requirements of the Service under section 7(c) of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 *et seq.*).

Please follow the link below to see if your proposed project has the potential to affect other species or their habitats under the jurisdiction of the National Marine Fisheries Service:

http://www.nwr.noaa.gov/protected_species/species_list/species_lists.html

New information based on updated surveys, changes in the abundance and distribution of species, changed habitat conditions, or other factors could change this list. Please feel free to contact us if you need more current information or assistance regarding the potential impacts to federally proposed, listed, and candidate species and federally designated and proposed critical habitat. Please note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the Act, the accuracy of this species list should be verified after 90 days. This verification can be completed formally or informally as desired. The Service recommends that verification be completed by visiting the ECOS-IPaC website at regular intervals during project planning and implementation for updates to species lists and information. An updated list may be requested through the ECOS-IPaC system by completing the same process used to receive the enclosed list.

The purpose of the Act is to provide a means whereby threatened and endangered species and the ecosystems upon which they depend may be conserved. Under sections 7(a)(1) and 7(a)(2) of the Act and its implementing regulations (50 CFR 402 *et seq.*), Federal agencies are required to utilize their authorities to carry out programs for the conservation of threatened and endangered species and to determine whether projects may affect threatened and endangered species and/or designated critical habitat.

A Biological Assessment is required for construction projects (or other undertakings having similar physical impacts) that are major Federal actions significantly affecting the quality of the human environment as defined in the National Environmental Policy Act (42 U.S.C. 4332(2) (c)). For projects other than major construction activities, the Service suggests that a biological evaluation similar to a Biological Assessment be prepared to determine whether the project may affect listed or proposed species and/or designated or proposed critical habitat. Recommended contents of a Biological Assessment are described at 50 CFR 402.12.

If a Federal agency determines, based on the Biological Assessment or biological evaluation, that listed species and/or designated critical habitat may be affected by the proposed project, the agency is required to consult with the Service pursuant to 50 CFR 402. In addition, the Service recommends that candidate species, proposed species and proposed critical habitat be addressed within the consultation. More information on the regulations and procedures for section 7 consultation, including the role of permit or license applicants, can be found in the "Endangered Species Consultation Handbook" at:

<http://www.fws.gov/endangered/esa-library/pdf/TOC-GLOS.PDF>

Please be aware that bald and golden eagles are protected under the Bald and Golden Eagle Protection Act (16 U.S.C. 668 *et seq.*), and projects affecting these species may require development of an eagle conservation plan (http://www.fws.gov/windenergy/eagle_guidance.html). Additionally, wind energy projects should follow the wind energy guidelines (<http://www.fws.gov/windenergy/>) for minimizing impacts to migratory birds and bats.

Guidance for minimizing impacts to migratory birds for projects including communications towers (e.g., cellular, digital television, radio, and emergency broadcast) can be found at: <http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/towers.htm>; <http://www.towerkill.com>; and <http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/comtow.html>.

We appreciate your concern for threatened and endangered species. The Service encourages Federal agencies to include conservation of threatened and endangered species into their project planning to further the purposes of the Act. Please include the Consultation Tracking Number in the header of this letter with any request for consultation or correspondence about your project that you submit to our office.

Attachment(s):

- Official Species List

Official Species List

This list is provided pursuant to Section 7 of the Endangered Species Act, and fulfills the requirement for Federal agencies to "request of the Secretary of the Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action".

This species list is provided by:

Sacramento Fish And Wildlife Office

Federal Building

2800 Cottage Way, Room W-2605

Sacramento, CA 95825-1846

(916) 414-6600

Project Summary

Consultation Code: 08ESMF00-2019-SLI-3043

Event Code: 08ESMF00-2021-E-00476

Project Name: Guadalupe River Bridge Replacement

Project Type: TRANSPORTATION

Project Description: The project is located in the City of San Jose, Santa Clara County, east of State Route 87 and north of Willow St. The Guadalupe River is crossed by two railroad bridges in this location, each carrying a single track. The downstream bridge (MT-1) is a wooden trestle structure constructed in 1935, while the upstream bridge is a concrete structure from 1990 (constructed as part of a Caltrans freeway project). The 1935 MT-1 bridge urgently needs to be replaced with a new structure in order to maintain safe and reliable operations for all users. The MT-1 bridge does not meet current railroad structural design standards (including seismic criteria). The existing MT-2 bridge does not require replacement and meets seismic criteria.

The MT-1 and MT-2 bridges are located along a sharp meander of the Guadalupe River and the river exhibits a high degree of floodplain fill, channel confinement and bank failures. The geomorphic issues directly affect the safety and reliability of the railroad bridges by eroding directly towards the bridge abutments. To address these safety issues and protect the rail bridge asset, the Peninsula Corridor Joint Powers Board (JPB) proposes to widen the channel, replace the MT-1 bridge with a new, longer bridge, and to extend the southern end of the MT-2 bridge over the widened channel.

Project Location:

Approximate location of the project can be viewed in Google Maps: <https://www.google.com/maps/place/37.31778936125349N121.88923063975588W>



Counties: Santa Clara, CA

Endangered Species Act Species

There is a total of 8 threatened, endangered, or candidate species on this species list.

Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species.

IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries¹, as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

See the "Critical habitats" section below for those critical habitats that lie wholly or partially within your project area under this office's jurisdiction. Please contact the designated FWS office if you have questions.

-
1. [NOAA Fisheries](#), also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

Birds

NAME	STATUS
California Clapper Rail <i>Rallus longirostris obsoletus</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/4240	Endangered
California Least Tern <i>Sterna antillarum browni</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/8104	Endangered

Amphibians

NAME	STATUS
California Red-legged Frog <i>Rana draytonii</i> There is final critical habitat for this species. Your location is outside the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/2891 Species survey guidelines: https://ecos.fws.gov/ipac/guideline/survey/population/205/office/11420.pdf	Threatened
California Tiger Salamander <i>Ambystoma californiense</i> Population: U.S.A. (Central CA DPS) There is final critical habitat for this species. Your location is outside the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/2076	Threatened

Fishes

NAME	STATUS
Delta Smelt <i>Hypomesus transpacificus</i> There is final critical habitat for this species. Your location is outside the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/321	Threatened

Insects

NAME	STATUS
Bay Checkerspot Butterfly <i>Euphydryas editha bayensis</i> There is final critical habitat for this species. Your location is outside the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/2320	Threatened
San Bruno Elfin Butterfly <i>Callophrys mossii bayensis</i> There is proposed critical habitat for this species. The location of the critical habitat is not available. Species profile: https://ecos.fws.gov/ecp/species/3394	Endangered

Flowering Plants

NAME	STATUS
Robust Spineflower <i>Chorizanthe robusta var. robusta</i> There is final critical habitat for this species. Your location is outside the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/9287	Endangered

Critical habitats

THERE ARE NO CRITICAL HABITATS WITHIN YOUR PROJECT AREA UNDER THIS OFFICE'S JURISDICTION.

D.2 NMFS Species Query Results

NMFS Species Query Results

For the San Jose West Quad

http://www.westcoast.fisheries.noaa.gov/maps_data/california_species_list_tools.html

Accessed online October 2, 2019

Quad Name **San Jose West**

Quad Number **37121-C8**

ESA Anadromous Fish

SONCC Coho ESU (T) -
CCC Coho ESU (E) -
CC Chinook Salmon ESU (T) -
CVSR Chinook Salmon ESU (T) -
SRWR Chinook Salmon ESU (E) -
NC Steelhead DPS (T) -
CCC Steelhead DPS (T) - **X**
SCCC Steelhead DPS (T) -
SC Steelhead DPS (E) -
CCV Steelhead DPS (T) -
Eulachon (T) -
sDPS Green Sturgeon (T) -

ESA Anadromous Fish Critical Habitat

SONCC Coho Critical Habitat -
CCC Coho Critical Habitat -
CC Chinook Salmon Critical Habitat -
CVSR Chinook Salmon Critical Habitat -
SRWR Chinook Salmon Critical Habitat -
NC Steelhead Critical Habitat -
CCC Steelhead Critical Habitat - **X**
SCCC Steelhead Critical Habitat -
SC Steelhead Critical Habitat -
CCV Steelhead Critical Habitat -
Eulachon Critical Habitat -

sDPS Green Sturgeon Critical Habitat -

ESA Marine Invertebrates

Range Black Abalone (E) -

Range White Abalone (E) -

ESA Marine Invertebrates Critical Habitat

Black Abalone Critical Habitat -

ESA Sea Turtles

East Pacific Green Sea Turtle (T) -

Olive Ridley Sea Turtle (T/E) -

Leatherback Sea Turtle (E) -

North Pacific Loggerhead Sea Turtle (E) -

ESA Whales

Blue Whale (E) -

Fin Whale (E) -

Humpback Whale (E) -

Southern Resident Killer Whale (E) -

North Pacific Right Whale (E) -

Sei Whale (E) -

Sperm Whale (E) -

ESA Pinnipeds

Guadalupe Fur Seal (T) -

Steller Sea Lion Critical Habitat -

Essential Fish Habitat

Coho EFH -

X

Chinook Salmon EFH -

X

Groundfish EFH -

Coastal Pelagics EFH -

Highly Migratory Species EFH -

MMPA Species (See list at left)

ESA and MMPA Cetaceans/Pinnipeds

**See list at left and consult the NMFS Long Beach office
562-980-4000**

MMPA Cetaceans -

MMPA Pinnipeds -

D.3 California Natural Diversity Database



Selected Elements by Common Name

California Department of Fish and Wildlife

California Natural Diversity Database



Query Criteria: Quad (San Jose West (3712138)) AND Taxonomic Group (Inland Waters OR Marine OR Estuarine OR Riverine OR Palustrine OR Fish OR Amphibians OR Reptiles OR Birds OR Mammals)

Table with 7 columns: Species, Element Code, Federal Status, State Status, Global Rank, State Rank, Rare Plant Rank/CDFW SSC or FP. Rows include American peregrine falcon, burrowing owl, California tiger salamander, Cooper's hawk, foothill yellow-legged frog, hoary bat, Northern California legless lizard, pallid bat, San Francisco dusky-footed woodrat, steelhead - central California coast DPS, Swainson's hawk, Townsend's big-eared bat, western pond turtle, and yellow rail.

Record Count: 14

D.4 Special-Status Plant Species Table

Table 1. Special-status Plants with Documented Occurrences within a CNDDDB search of the U.S. Geological Survey (USGS) 7.5-minute quadrangles: San Jose West, Milpitas, Calaveras Reservoir, San Jose East, Santa Teresa Hills, Los Gatos, Castle Rock Ridge, Cupertino, and Mountain View

Common Name (<i>Scientific Name</i>)	Listing Status ^a	Geographic Distribution in California	Habitat Requirements	Life Form, Blooming Period	Potential Occurrence in the Study Area ^b
Santa Clara thorn-mint (<i>Acanthomintha lanceolata</i>)	CRPR 4.3	Throughout the south San Francisco Bay region and northern San Joaquin Valley.	Chaparral (often serpentinite), cismontane woodland, coastal scrub; 80-1200 m.	Annual herb, March - June	Not Expected. The Study Area does not contain any of the habitat requirements and is lower in elevation than this species' typically inhabits. The nearest documented occurrences are within the rural areas in eastern Santa Clara County.
bent-flowered fiddleneck (<i>Amsinckia lunaris</i>)	CRPR 1B.2	Mid California, including Monterey, Santa Cruz, San Mateo, Marin, Alameda, Contra Costa, Napa, Lake and Colusa counties.	Coastal bluff scrub, cismontane woodland or valley and foothill grassland; 3-500 m.	Annual herb, March - June	Not Expected. The Study Area does not contain any of the habitat requirements for this species. The nearest documented occurrence for this species is over 9 miles southwest of the Study Area.
California androsae (<i>Androsace elongata</i> ssp. <i>acuta</i>)	CRPR 4.2	Various counties throughout the entirety of California.	Chaparral, cismontane woodland, coastal scrub, meadows and seeps, pinyon and juniper woodland, valley and foothill grassland, 150-1305 m.	Annual herb, March – June	Not Expected. The Study Area does not contain any of the habitat requirements and is lower in elevation than this species' typically inhabits. There are no documented occurrences of this species within urban regions of San Jose.
coast rockcress (<i>Arabis blepharophylla</i>)	CRPR 4.3	Throughout the San Francisco Bay region.	Broadleaved upland forest, coastal bluff scrub, coastal prairie, coastal scrub, 3-1100 m.	Perennial herb, February - May	Not Expected. The Study Area does not contain any of the habitat requirements for this species. There are no known nearby documented occurrences of this species.

Table 1. Special-status Plants with Documented Occurrences within a CNDDDB search of the U.S. Geological Survey (USGS) 7.5-minute quadrangles: San Jose West, Milpitas, Calaveras Reservoir, San Jose East, Santa Teresa Hills, Los Gatos, Castle Rock Ridge, Cupertino, and Mountain View

Common Name (<i>Scientific Name</i>)	Listing Status^a	Geographic Distribution in California	Habitat Requirements	Life Form, Blooming Period	Potential Occurrence in the Study Area^b
Bonny Doon manzanita (<i>Arctostaphylos silvicola</i>)	CRPR 1B.2	Only within Santa Cruz County.	Closed-cone coniferous forest, chaparral, lower montane coniferous forest; 120-600 m.	Perennial evergreen shrub, January - March	Not Expected. This species does not occur within Santa Clara County.
Alkali milk-vetch (<i>Astragalus tener</i> var. <i>tener</i>)	CRPR 1B.2	Endemic to the San Francisco Bay Area and surrounding counties.	Playas, valley and foothill grassland (adobe clay) or vernal pools on alkaline soils; 1-60 m.	Annual herb, March-June	Not Expected. The Study Area does not contain any of the habitat requirements. The nearest documented occurrence of this species is over 7.5 miles north of the Study Area, along the margins of the San Francisco Bay.
brittlescale (<i>Atriplex depressa</i>)	CRPR 1B.2	Scattered counties within and on the margins of the San Joaquin Valley.	Chenopod scrub, meadows and seeps, playas, valley and foothill grassland, vernal pools; 1-320 m.	Annual herb, April - October	Not Expected. The Study Area does not contain any of the habitat requirements. The nearest documented occurrence of this species is over 12 miles north of the Study Area, along the margins of the San Francisco Bay.
lesser saltscale (<i>Atriplex minuscula</i>)	CRPR 1B.1	Scattered counties within and on the margins of the San Joaquin Valley.	Chenopod scrub, playas, valley and foothill grassland; 15-200 m.	Annual herb, May to October	Not Expected. The Study Area does not contain any of the habitat requirements. The nearest documented occurrence of this species is over 12 miles north of the Study Area, along the margins of the San Francisco Bay.

Table 1. Special-status Plants with Documented Occurrences within a CNDDDB search of the U.S. Geological Survey (USGS) 7.5-minute quadrangles: San Jose West, Milpitas, Calaveras Reservoir, San Jose East, Santa Teresa Hills, Los Gatos, Castle Rock Ridge, Cupertino, and Mountain View

Common Name (<i>Scientific Name</i>)	Listing Status ^a	Geographic Distribution in California	Habitat Requirements	Life Form, Blooming Period	Potential Occurrence in the Study Area ^b
big-scale balsamroot (<i>Balsamorhiza macrolepis</i>)	CRPR 1B.2	Scattered counties throughout northern California.	Chaparral, cismontane woodland, valley and foothill grassland, 45-1555 m.	Perennial herb, March - June	Not Expected. The Study Area does not contain any of the habitat requirements and is lower in elevation than this species typically inhabits. The nearest documented occurrence is approximately 5 miles southwest of the Study Area, in a rural area of Santa Clara County.
Brewer's calandrinia (<i>Calandrinia breweri</i>)	CRPR 4.2	Scattered along the California coast, occasional in the northern central valley.	Sandy or loamy soils, disturbed sites and burns, chaparral, coastal scrub, 10-1220m.	Annual herb, (January) March-June	Not Expected. The Study Area does not contain any of the habitat requirements for this species. The nearest documented occurrences are within the far western portions of Santa Clara Valley in the hilly, rural regions.
Santa Cruz Mountains pussypaws (<i>Calyptridium parryi</i> var. <i>hesseae</i>)	CRPR 1B.1	Northern California counties including: Monterey, Santa Clara, Santa Cruz, San Luis Obispo, and Stanislaus.	Chaparral, cismontane woodland, in sandy or gravelly soil openings; 300-1535 m.	Annual herb, May - August	Not Expected. The Study Area does not contain any of the habitat requirements and is lower in elevation than this species typically inhabits. The nearest documented occurrence is approximately 14.5 miles south of the Study Area.
South Coast Range morning-glory (<i>Calystegia collina</i> ssp. <i>venusta</i>)	CRPR 4.3	Throughout the central coast counties.	Chaparral, cismontane woodland, valley and foothill grassland in serpentinite or sedimentary soils; 425-1490 m.	Perennial rhizomatous herb, April to June	Not Expected. The Study Area is far outside this species' elevation range and does not contain any of the habitat requirements.

Table 1. Special-status Plants with Documented Occurrences within a CNDDDB search of the U.S. Geological Survey (USGS) 7.5-minute quadrangles: San Jose West, Milpitas, Calaveras Reservoir, San Jose East, Santa Teresa Hills, Los Gatos, Castle Rock Ridge, Cupertino, and Mountain View

Common Name (<i>Scientific Name</i>)	Listing Status ^a	Geographic Distribution in California	Habitat Requirements	Life Form, Blooming Period	Potential Occurrence in the Study Area ^b
chaparral harebell (<i>Campanula exigua</i>)	CRPR 1B.2	Throughout the central coast counties.	Chaparral (in rocky soils, usually serpentinite); 275-1250 m.	Annual herb, May - June	Not Expected. The Study Area is far outside this species' elevation range and does not contain any of the habitat requirements.
Congdon's tarplant (<i>Centromadia parryi</i> ssp. <i>congdonii</i>)	CRPR 1B.1	Throughout western California from San Luis Obispo to Solano County.	Valley and foothill grasslands with alkaline or clay soils; 0-230 m.	Annual herb, May - November	Not Expected. The Study Area does not contain the grassland habitat typical of this species. The nearest documented extant occurrence is over 7.5 miles north of the Study Area, along the margins of the San Francisco Bay.
dwarf soaproot (<i>Chlorogalum pomeridianum</i> var. <i>minus</i>)	CRPR 1B.2	Occurs rarely in scattered counties throughout California, including Alameda, Colusa, Glenn, Lake, Santa Clara, San Luis Obispo, Sonoma, and Tehama.	Chaparral, in serpentine soils; 120-1220 m.	Perennial bulbiferous herb, May - August	Not Expected. The Study Area is far outside this species' elevation range and does not contain any of the habitat requirements.
Point Reyes bird's beak (<i>Chloropyron maritimum</i> ssp. <i>palustre</i>)	CRPR 1B.2	Extant occurrences in Humboldt, Marin, San Francisco, and Sonoma Counties.	Marshes and swamps (coastal salt); 0-10 m.	Annual herb (hemiparasitic), June-October	Not Expected. This species has no extant populations in Santa Clara Valley.
Ben Lomond spineflower (<i>Chorizanthe pungens</i> var. <i>hartwegiana</i>)	FE, CRPR 1B.2	Known only from sandhill parklands in the Santa Cruz Mountains.	Lower montane coniferous forest (maritime ponderosa pine sandhills); 90-610 m.	Annual herb, April - July	Not Expected. The Study Area is far outside this species' elevation range and does not contain any of the habitat requirements.
robust spineflower (<i>Chorizanthe robusta</i> var. <i>robusta</i>)	FE, CRPR 1B.1	Mostly extirpated from historic range, remains in Monterey, Santa Cruz, and San Francisco counties, possibly Marin.	Chaparral (maritime), cismontane woodland (openings), coastal dunes, or coastal scrub in sandy or gravelly soils; 3-300 m.	Annual herb, April - September	Not Expected. This species has no extant populations in Santa Clara Valley.

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Common Name (<i>Scientific Name</i>)	Listing Status^a	Geographic Distribution in California	Habitat Requirements	Life Form, Blooming Period	Potential Occurrence in the Study Area^b
Mt. Hamilton fountain thistle (<i>Cirsium fontinale</i> var. <i>campylon</i>)	CRPR 1B.2	Only within Alameda, Santa Clara, and Stanislaus counties.	Chaparral, cismontane woodland, valley and foothill grassland, in serpentinite seeps; 100-890 m.	Perennial herb, April – October	Not Expected. The Study Area is far outside this species' elevation range and does not contain any of the habitat requirements.
Santa Clara red ribbons (<i>Clarkia concinna</i> ssp. <i>automixa</i>)	CRPR 4.3	Southeast of the San Francisco Bay Area.	Chaparral and cismontane woodland, 90-1500m.	Annual herb, (April) May-June (July)	Not Expected. The Study Area is far outside this species' elevation range and does not contain any of the habitat requirements.
Lewis' clarkia (<i>Clarkia lewisii</i>)	CRPR 4.3	Only within Monterey and San Benito counties.	Broadleaved upland forest, closed-cone coniferous forest, chaparral, cismontane woodland, coastal scrub; 30-1195 m.	Annual herb, May to July	Not Expected. This species has no extant populations in Santa Clara Valley.
San Francisco collinsia (<i>Collinsia multicolor</i>)	CRPR 1B.2	Mid-coastal California from Monterey to Marin county including Santa Clara county.	Moist shady woodland, closed- cone coniferous forests and coastal scrub. Occasionally found in serpentine; 30-250 m.	Annual herb, March – May	Not Expected. The Study Area does not contain any of the required habitat for this species. The nearest documented occurrence is over 5 miles southeast of the Study Area.
Clustered lady's- slipper (<i>Cypripedium fasciculatum</i>)	CRPR 4.2	Throughout the mountainous regions of northern California.	Usually serpentinite seeps and streambanks, lower montane coniferous forest, north coast coniferous forest, 100-2435m.	Perennial rhizomatous herb, March- August.	Not Expected. The Study Area is far outside this species' elevation range and does not contain any of the habitat requirements.
western leatherwood (<i>Dirca occidentalis</i>)	CRPR 1B.2	San Francisco Bay area including Santa Clara to Marin county and east to Alameda county.	Cool, moist slopes in foothill woodland and riparian forests. Mesic environments in broadleaved upland forests, chaparral and coniferous woodlands and mixed evergreen and oak woodlands; 25-425 m.	Perennial deciduous shrub, January – April.	Not Expected. The Study Area does not contain any of the required habitat for this species. The nearest documented occurrence is over 10 miles west of the Study Area, in the rural regions of west Santa Clara County.

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Common Name (<i>Scientific Name</i>)	Listing Status^a	Geographic Distribution in California	Habitat Requirements	Life Form, Blooming Period	Potential Occurrence in the Study Area^b
Santa Clara Valley dudleya (<i>Dudleya abramsii</i> ssp. <i>setchellii</i>)	FE, CRPR 1B.1	Only within Santa Clara County.	Cismontane woodland, valley and foothill grassland in serpentinite and/or rocky soils; 60-455 m.	Perennial herb, April - October	Not Expected. The Study Area is outside this species' typical elevation range and does not contain any of the habitat requirements. The nearest documented occurrence of this species is over 2.5 miles south of the Study Area.
Jepson's woolly sunflower (<i>Eriophyllum jepsonii</i>)	CRPR 4.3	Occurs rarely in scattered counties throughout California.	Chaparral, cismontane woodland, coastal scrub, sometimes in serpentinite soils; 200-1025 m.	Perennial herb, April - June	Not Expected. The Study Area is far outside this species' elevation range and does not contain any of the habitat requirements.
Hoover's button-celery (<i>Eryngium aristulatum</i> var. <i>hooveri</i>)	CRPR 1B.1	Endemic to Alameda, San Benito, Santa Clara, San Diego and San Luis Obispo Counties.	Vernal pools; 3-45 m.	Annual/perennial herb, July- August	Not Expected. The Study Area does not contain any vernal pool habitat suitable for this species. The nearest documented occurrence of this species is over 6.5 miles north of the Study Area and is listed as "possibly extirpate," along with most other nearby occurrences.
San Joaquin spearscale (<i>Extriplex joaquinana</i>)	CRPR 1B.2	Endemic to the Coast Ranges and Central Valley of central California.	Chenopod scrub, meadows and seeps, playas and valley and foothill grassland in alkaline soils; 1-835 m.	Annual herb, April-October	Not Expected. The Study Area does not contain any required habitat for this species. The nearest documented occurrences of this species are over 12.5 miles north of the Study Area.

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Common Name (<i>Scientific Name</i>)	Listing Status ^a	Geographic Distribution in California	Habitat Requirements	Life Form, Blooming Period	Potential Occurrence in the Study Area ^b
fragrant fritillary (<i>Fritillaria liliacea</i>)	CRPR 1B.2	Found throughout northern and central California wherever there is suitable habitat.	Cismontane woodland and coastal scrub and prairie, in valley and foothill grasslands (often serpentine bunchgrass grassland); 3-410 m.	Perennial bulbiferous herb, February – April	Not Expected. The Study Area does not contain any required habitat for this species. The nearest documented occurrence of this species is approximately 6 miles southeast of the Study Area, in the rural portion of eastern Santa Clara County.
phlox-leaf serpentine bedstraw (<i>Galium andrewsii</i> ssp. <i>gatense</i>)	CRPR 4.2	Occurs in scattered counties throughout California.	Chaparral, cismontane woodland, lower montane coniferous forest in serpentinite or rocky soils; 150-1450 m.	Perennial herb, April – July	Not Expected. The Study Area is far outside this species' elevation range and does not contain any of the habitat requirements.
Loma Prieta hoita (<i>Hoita strobilina</i>)	CRPR 1B.1	Within the south San Francisco Bay region.	Chaparral, cismontane woodland, riparian woodland usually in serpentinite or mesic soils; 30-860 m.	Perennial herb, May - July	Not Expected. The Study Area does not contain any required habitat for this species. The nearest documented occurrence of this species is approximately 7.5 miles south of the Study Area, in the rural portion of southern Santa Clara County.
Coast iris (<i>Iris longipetala</i>)	CRPR 4.2	Scattered throughout northwest California.	Mesic, coastal prairie, lower montane coniferous forest, meadows and seeps, 0-600m.	Perennial rhizomatous herb, March-May.	Not Expected. The Study Area does not contain any required habitat for this species. The nearest documented occurrences of this species are in the rural areas in eastern and western Santa Clara County.

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Common Name (<i>Scientific Name</i>)	Listing Status^a	Geographic Distribution in California	Habitat Requirements	Life Form, Blooming Period	Potential Occurrence in the Study Area^b
Contra Costa goldfields (<i>Lasthenia conjugens</i>)	FE, CRPR 1B.1	Endemic to western California from Santa Rosa to Monterey.	Cismontane woodland, playas (alkaline), valley and foothill grassland and vernal pools; 0- 470 m. elevation.	Annual herb, March-June	Not Expected. The Study Area does not contain any required habitat for this species. The nearest documented extant occurrences of this species are approximately 12.5 miles north of the Study Area.
bristly leptosiphon (<i>Leptosiphon acicularis</i>)	CRPR 4.2	Occurs in counties surrounding the San Francisco Bay area.	Chaparral, cismontane woodland, coastal prairie, valley and foothill grassland; 55-1500 m.	Annual herb, April - July	Not Expected. The Study Area does not contain any required habitat for this species. The nearest documented extant occurrences of this species are within the rural areas south of San Jose.
Serpentine leptosiphon (<i>Leptosiphon ambiguus</i>)	CRPR 4.2	Within rural regions around the San Jose area.	Usually in serpentinite soil, cismontane woodland, coastal scrub, valley and foothill grassland, 120-1130m.	Annual herb, March-June.	Not Expected. The Study Area is far outside this species' elevation range and does not contain any of the habitat requirements.
large-flowered leptosiphon (<i>Leptosiphon grandifloras</i>)	CRPR 4.2	Occurs in scattered counties throughout California.	Coastal bluff scrub, closed-cone coniferous forest, cismontane woodland, coastal dunes, coastal prairie, coastal scrub, valley and foothill grassland, usually in sandy soils; 5-1220 m.	Annual herb, April - August	Not Expected. The Study Area does not contain any required habitat for this species. The nearest documented occurrences of this species are within the rural areas south of San Jose.

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Common Name (<i>Scientific Name</i>)	Listing Status^a	Geographic Distribution in California	Habitat Requirements	Life Form, Blooming Period	Potential Occurrence in the Study Area^b
Woolly-headed lessingia (<i>Lessingia hololeuca</i>)	CRPR 3	Scattered throughout northwest California.	Clay, serpentinite soils, broadleafed upland forests, coastal scrub, lower montane coniferous forests, valley and foothill grassland, 15-305m.	Annual herb, June-October	Not Expected. The Study Area does not contain any required habitat for this species. The nearest documented occurrences of this species are within the rural areas south and northeast of San Jose.
smooth lessingia (<i>Lessingia micradenia</i> var. <i>glabrata</i>)	CRPR 1B.2	Occurs only in Santa Clara County.	Chaparral, cismontane woodland, valley and foothill grassland in serpentinite, often roadside soils; 120-420 m.	Annual herb, July - November	Not Expected. The Study Area is far outside this species' elevation range and does not contain any of the habitat requirements.
arcuate bush mallow (<i>Malacothamnus arcuatus</i>)	CRPR 1B.2	Known from San Mateo, Santa Clara, and Merced counties.	Ultramafic chaparral, gravelly alluvium. Locally, in openings in mixed evergreen forests; 15-355 m.	Perennial evergreen shrub, April – September	Not Expected. The Study Area does not contain any required habitat for this species. The nearest documented extant occurrences of this species are approximately 12.5 miles north of the Study Area.
Hall's bush-mallow (<i>Malacothamnus hallii</i>)	CRPR 1B.2	Occurs to the west, east, and south of the San Francisco Bay.	Chaparral, coastal scrub, 10- 760m.	Perennial evergreen shrub, (April) May-September (October).	Not Expected. The Study Area does not contain any required habitat for this species. The nearest documented extant occurrences of this species are approximately 7 miles south of the Study Area.

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Common Name (<i>Scientific Name</i>)	Listing Status ^a	Geographic Distribution in California	Habitat Requirements	Life Form, Blooming Period	Potential Occurrence in the Study Area ^b
Mt. Diablo cottonweed (<i>Micropus amphibolus</i>)	CRPR 3.2	Scattered throughout northwest California.	Rocky soils, broadleaved upland forest, chaparral, cismontane woodland, valley and foothill grassland, 45-825m.	Annual herb, March-May.	Not Expected. The Study Area does not contain any required habitat for this species. The nearest documented occurrences of this species are within the more rural portions of southeast Santa Clara County.
elongate copper moss (<i>Mielichhoferia elongata</i>)	CRPR 4.3	Occurs in scattered counties throughout California.	Broadleaved upland forest, chaparral, cismontane woodland, coastal scrub, lower montane coniferous forest, meadows and seeps, subalpine coniferous forest in metamorphic rock, usually acidic soils, usually vernal mesic soils, often on roadsides, sometimes carbonate; 0-1960 m.	Moss	Not Expected. The Study Area does not contain any required habitat for this species. The nearest documented occurrences of this species are within the more rural portions along the northeast portion of Santa Clara County.
woodland woollythreads (<i>Monolopia gracilens</i>)	CRPR 1B.2	Through central California from San Mateo and Contra Costa counties south to San Luis Obispo county.	Grassy openings in chaparral, valley and foothill grasslands (serpentine), cismontane woodland, broadleaved upland forests, North coast coniferous forest. Sandy to rocky soils; 100-1200 m.	Annual herb, February – July	Not Expected. The Study Area is far outside this species' elevation range and does not contain any of the habitat requirements.
prostrate vernal pool navarretia (<i>Navarretia prostrata</i>)	CRPR 1B.2	Occurs in scattered counties throughout central and southern California.	Coastal scrub, meadows and seeps, valley and foothill grassland (alkaline), vernal pools in mesic soils; 3-1210 m.	Annual herb, April - July	Not Expected. The Study Area does not contain any required habitat for this species. The nearest documented occurrences of this species are over 12.5 miles north of the Study Area, along the margins of the San Francisco Bay.

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Common Name (Scientific Name)	Listing Status^a	Geographic Distribution in California	Habitat Requirements	Life Form, Blooming Period	Potential Occurrence in the Study Area^b
Santa Cruz Mountains beardtongue (<i>Penstemon rattanii</i> var. <i>kleei</i>)	CRPR 1B.2	Only within Santa Cruz and Santa Clara counties.	Chaparral, lower montane coniferous forest, north coast coniferous forest in sandy shale slopes; sometimes in the transition between forest and chaparral; 455-915 m.	Perennial herb, May - June	Not Expected. The Study Area is far outside this species' elevation range and does not contain any of the habitat requirements.
white-rayed pentachaeta (<i>Pentachaeta</i> <i>bellidiflora</i>)	FE, SE, CRPR 1B.1	California endemic; extant occurrences in San Mateo County.	Cismontane woodland or valley and foothills grassland (often serpentinite); 35-620 m.	Annual herb, March – May	Not Expected. This species does not have extant populations outside San Mateo County.
white-flowered rein orchid (<i>Piperia candida</i>)	CRPR 1B.2	Through northern coastal California from Del Norte county south to Santa Cruz county.	Broadleaved upland forest, lower montane coniferous forest, North Coast coniferous forest. Often on mossy banks and rock outcrops or in the forest duff; 30-1310 m.	Perennial herb, May - September	Not Expected. The Study Area does not contain any required habitat for this species. The nearest documented occurrences of this species are over 18.5 miles southwest of the Study Area, in rural Santa Cruz County.
Hickman's popcornflower (<i>Plagiobothrys</i> <i>chorisianus</i> var. <i>hickmanii</i>)	CRPR 4.2	Occurs only in Monterey, San Benito, Santa Clara, Santa Cruz, San Luis Obispo, and possibly San Mateo counties.	Closed-cone coniferous forest, chaparral, coastal scrub, marshes and swamps, vernal pools; 15-185 m.	Annual herb, April - June	Not Expected. The Study Area does not contain any required habitat for this species. The nearest documented occurrences of this species are in the rural portions of southwest Santa Clara County.
hairless popcornflower (<i>Plagiobothrys glaber</i>)	CRPR 1A	Endemic to Alameda, Marin, San Benito, and Santa Clara Counties.	Meadows and seeps (alkaline) and marshes and swamps (coastal salt); 15-180 m. elevation.	Annual herb, March-May	Not Expected. There are no known extant occurrences of this species within Santa Clara County and the Study Area does not contain suitable habitat.

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Common Name (<i>Scientific Name</i>)	Listing Status^a	Geographic Distribution in California	Habitat Requirements	Life Form, Blooming Period	Potential Occurrence in the Study Area^b
California alkali grass (<i>Puccinellia simplex</i>)	CRPR 1B.2	Occurs in scattered counties throughout California.	Chenopod scrub, meadows and seeps, valley and foothill grassland, vernal pools in alkaline and/or vernal mesic soils, in sinks, flats, and lake margins; 2-930 m.	Annual herb, March - May	Not Expected. The Study Area does not contain any required habitat for this species. The nearest documented occurrence of this species is over 12 miles north of the Study Area, along the margin of the San Francisco Bay.
rock sanicle (<i>Sanicula saxatilis</i>)	CR; CRPR 1B.2	Only within Santa Clara and Contra Costa counties.	Broadleaved upland forest, chaparral, valley and foothill grassland in rocky, scree, or talus; 620-1175 m.	Perennial herb, April - May	Not Expected. The Study Area is far outside this species' elevation range and does not contain any of the habitat requirements.
chaparral ragwort (<i>Senecio aphanactis</i>)	CRPR 2B.2	Occurs in western California from Concord to the Mexican border.	Chaparral, cismontane woodland and coastal scrub, sometimes in serpentine soils; 15-800 m.	Annual herb, January-April	Not Expected. The Study Area does not contain any required habitat for this species. The nearest documented occurrence of this species is over 2.5 miles southwest of the Study Area, in an open space area.
maple-leaved checkerbloom (<i>Sidalcea malachroides</i>)	CRPR 4.2	Occurs along coastal regions throughout central and northern California.	Broadleaved upland forest, coastal prairie, coastal scrub, North Coast coniferous forest, riparian woodland, often in disturbed areas; 0-730 m.	Perennial herb, April - August	Not Expected. The Study Area does not contain any required habitat for this species. The nearest documented occurrence of this species is in the rural portion near the northeast of Santa Clara County.

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Common Name (Scientific Name)	Listing Status^a	Geographic Distribution in California	Habitat Requirements	Life Form, Blooming Period	Potential Occurrence in the Study Area^b
Metcalfe Canyon jewelflower (<i>Streptanthus albidus</i> ssp. <i>albidus</i>)	FE; CRPR 1B.1	Occurs only within Santa Clara County.	Valley and foothill grassland in serpentinite soils; 45-800 m.	Annual herb, April - June	Not Expected. The Study Area does not contain any required habitat for this species. The nearest documented occurrence of this species is over 3 miles southwest of the Study Area, in an open space area.
most beautiful jewelflower (<i>Streptanthus albidus</i> ssp. <i>peramoenus</i>)	CRPR 1B.2	Occurs in coastal regions south of the San Francisco Bay area south to San Luis Obispo County.	Chaparral, cismontane woodland, valley and foothill grassland in serpentinite soils; 95-1000 m.	Annual herb, April - September	Not Expected. The Study Area is far outside this species' elevation range and does not contain any of the habitat requirements.
slender-leaved pondweed (<i>Stuckenia filiformis</i> ssp. <i>alpina</i>)	CRPR 2B.2	Occurs in Northern California in the Inner Coast Ranges and Sierra Nevadas from east of Redding to near San Jose.	Marshes and swamps (assorted shallow freshwater); 300-2150 m.	Perennial rhizomatous herb, May-July	Not Expected. The Study Area is far outside this species' elevation range and does not contain suitable habitat.
California seablite (<i>Suaeda californica</i>)	FE, CRPR 1B.1	Endemic to coastal California in the San Francisco Bay Area and near San Luis Obispo.	Marshes and swamps (coastal salt); 0-15 m.	Perennial evergreen shrub, July-October	Not Expected. The Study Area does not contain the coastal salt marsh habitat required by this species.
Santa Cruz clover (<i>Trifolium buckwestiorum</i>)	CRPR 1B.1	Scattered throughout northwest California.	Gravelly soils, and occurring on margins, broadleaved upland forest, cismontane woodland, coastal prairie, 105-610m.	Annual herb, April-October.	Not Expected. The Study Area is far outside this species' elevation range and does not contain any of the habitat requirements.

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Common Name (<i>Scientific Name</i>)	Listing Status ^a	Geographic Distribution in California	Habitat Requirements	Life Form, Blooming Period	Potential Occurrence in the Study Area ^b
saline clover (<i>Trifolium hydrophilum</i>)	CRPR 1B.2	Endemic to San Francisco Bay Area and surrounding counties.	Marshes and swamps, valley and foothill grassland (mesic, alkaline), vernal pools; 0-300 m.	Annual herb, April – June	Not Expected. The Study Area does not contain any required habitat for this species. The nearest documented occurrence of this species is approximately 1.5 miles north of the Study Area; however, the occurrence is from 1903 and is in a heavily urbanized area now. The next nearest documented occurrence is over 9 miles northwest of the Study Area, along the margin of the San Francisco Bay. The Study Area does not contain alkaline wetlands.
caper-fruited tropidocarpum (<i>Tropidocarpum capparideum</i>)	CRPR 1B.1	California endemic; extant occurrences in Fresno, Monterey, and San Luis Obispo counties.	Valley and foothill grassland (alkaline hills); 1-455 m.	Annual herb, March-May	Not Expected. While this species historically occurred in the south bay area there are no extant occurrences of this species near the Study Area. The Study Area does not contain suitable alkaline habitat.

^a Status explanations:

Federal:

FE = Listed as endangered under the Federal Endangered Species Act.

FT = Listed as threatened under the Federal Endangered Species Act.

State:

SE= Listed as endangered under the California Endangered Species Act. **None.** There is no potential habitat in the Study area and there are no known occurrences within 5 miles.jmn

ST= Listed as threatened under the California Endangered Species Act.

SR= Listed as rare under the California Endangered Species Act.

California Rare Plant Rank:

1B= Plants Rare, Threatened, or Endangered in California and Elsewhere

2B= Plants Rare, Threatened, or Endangered in California, But More Common Elsewhere

3 = Knowledge on plant lacking, unable to determine accurate population numbers

4 = Plants have a limited distribution or are infrequent through California and their status should be monitored regularly

^b Potential Occurrence explanations:

Present: Species was observed on the project site, or recent species records (within five years) from literature are known within the study area.

High: The CNDDDB or other reputable documents record the occurrence of the species off-site, but within a 10-mile radius of the study area and within the last 10 years. High-quality suitable habitat is present within the study area.

Moderate: Species does not meet all terms of High or Low category. For example: CNDDDB or other reputable documents may record the occurrence of the species near but beyond a 10-mile radius of the study area, or some of the components representing suitable habitat are present within or adjacent to the study area, but the habitat is substantially degraded or fragmented.

Low: The CNDDDB or other documents may or may not record the occurrence of the species within a 10-mile radius of the study area. However, few components of suitable habitat are present within or adjacent to the study area.

Not Expected: CNDDDB or other documents do not record the occurrence of the species within or reasonably near the study area and within the last 10 years, and no or extremely few components of suitable habitat are present within or adjacent to the study area.

D.5 Special-Status Wildlife Species Table

Table 2. Special-status Wildlife with Documented Occurrences within a CNDDDB search of the U.S. Geological Survey (USGS) 7.5-minute quadrangles: San Jose West, Milpitas, Calaveras Reservoir, San Jose East, Santa Teresa Hills, Los Gatos, Castle Rock Ridge, Cupertino, and Mountain View

Common Name (<i>Scientific Name</i>)	Listing Status ^a	Geographic Distribution in California	Habitat Requirements	Potential Occurrence in the Study Area ^b
Invertebrates				
Crotch bumble bee (<i>Bombus crotchii</i>)	SC	Coastal California east to the Sierra-Cascade crest and south into Mexico.	Food plant genera include <i>Antirrhinum</i> , <i>Phacelia</i> , <i>Clarkia</i> , <i>Dendromecon</i> , <i>Eschscholzia</i> , and <i>Eriogonum</i> .	Low Potential. The Study Area is highly urbanized and contains primarily nonnative and landscaped plant species. However, there is a documented occurrence of this species from 1903 approximately 1 mile north of the Study Area.
western bumble bee (<i>Bombus occidentalis</i>)	SC	Once common & widespread, species has declined precipitously from central CA to southern B.C., perhaps from disease.	Bumble bees (<i>Bombus</i> spp.) are generalist pollinators that consume pollen and play a valuable role in the reproduction of a wide variety of plants, including California specialty crops such as tomato, squash, melon, and pepper, and numerous wildflowers	Low Potential. The Study Area is highly urbanized and contains primarily nonnative and landscaped plant species. However, there is a documented occurrence of this species from 1903 approximately 1 mile north of the Study Area.

Table 2. Special-status Wildlife with Documented Occurrences within a CNDDDB search of the U.S. Geological Survey (USGS) 7.5-minute quadrangles: San Jose West, Milpitas, Calaveras Reservoir, San Jose East, Santa Teresa Hills, Los Gatos, Castle Rock Ridge, Cupertino, and Mountain View

Common Name (<i>Scientific Name</i>)	Listing Status ^a	Geographic Distribution in California	Habitat Requirements	Potential Occurrence in the Study Area ^b
Bay checkerspot butterfly (<i>Euphydryas editha bayensis</i>)	FT	Restricted to native grasslands on outcrops of serpentine soil in the vicinity of San Francisco Bay.	<i>Plantago erecta</i> is the primary host plant, <i>Castilleja densiflorus</i> and <i>C. purpurascens</i> are secondary host plants.	Not Expected. The study area is within the floodplain of the Guadalupe River, largely composed of alluvial soils that are heavily saturated and unable to support the host plant species for this species. In addition, serpentine soils are not present in the Study Area and therefore there is no potential for this species to occur. Finally, the project site is well outside of the mapped historic and current range of species.
vernal pool tadpole shrimp (<i>Lepidurus packardii</i>)	FE	Inhabits vernal pools and swales in the Sacramento Valley containing clear to highly turbid water.	Pools commonly found in grass-bottomed swales of unplowed grasslands. Some pools are mud-bottomed and highly turbid.	Not Expected. There is no vernal pool habitat for this species within the Study Area. The nearest documented occurrence of this species is over 12.5 miles north of the Study Area, along the margin of the San Francisco Bay.
Zayante band-winged grasshopper (<i>Trimerotropis infantilis</i>)	FE	Isolated sandstone deposits in the Santa Cruz Mountains (the Zayante Sand Hills ecosystem)	Mostly on sand parkland habitat but also in areas with well-developed ground cover & in sparse chaparral with grass.	Not Expected. The Study Area is well outside the known range for this species in the Santa Cruz Mountains. The only nearby documented occurrence is listed as extirpated and is over 10.5 miles southwest of the Study Area.

Table 2. Special-status Wildlife with Documented Occurrences within a CNDDDB search of the U.S. Geological Survey (USGS) 7.5-minute quadrangles: San Jose West, Milpitas, Calaveras Reservoir, San Jose East, Santa Teresa Hills, Los Gatos, Castle Rock Ridge, Cupertino, and Mountain View

Common Name (<i>Scientific Name</i>)	Listing Status ^a	Geographic Distribution in California	Habitat Requirements	Potential Occurrence in the Study Area ^b
Fish				
coho salmon – central California coast ESU (<i>Oncorhynchus kisutch</i> pop. 4)	FE, SE	Federal listing is for populations between Punta Gorda and San Lorenzo River. State listing is for populations south of Punta Gorda.	Adults migrate from a marine environment into the freshwater streams and rivers of their birth in order to mate (called anadromy). Require beds of loose, silt-free, coarse gravel for spawning. Also need cover, cool water & sufficient dissolved oxygen.	Not Expected. This species extant range is isolated to coastal watersheds only, and does not extend into the waters of the San Francisco Bay.
longfin smelt (<i>Spirinchus thaleichthys</i>)	FC, ST, CSSC	Slightly upstream from Rio Vista and Medford Island through Suisun Bay and Suisun Marsh; San Pablo Bay; San Francisco Bay; Gulf of the Farallones; Humboldt Bay and Eel River estuary	Found in open water of estuaries, mostly in the middle or bottom of water columns, prefer salinities of 15-30 ppt. but can be found in completely fresh water to almost pure sea water.	Not Expected. This species' range does not extend inland from the San Francisco Bay, which is approximately 8.5 miles downstream of the Study Area.
steelhead- Central California Coast DPS (<i>Oncorhynchus mykiss irideus</i>)	FT	This distinct population segment (DPS) includes all anadromous <i>O. mykiss</i> (steelhead) populations from the Russian River south to Soquel Creek and to, but not including, the Pajaro River. Populations in the San Francisco and San Pablo Basins are also included.	Adults migrate from a marine environment into the freshwater streams and rivers of their birth in order to mate (called anadromy). Unlike other Pacific salmonids, they can spawn more than one time (called iteroparity). Migrations can be hundreds of miles (USFWS 2017).	High Potential. This species' range extends through the Guadalupe River and there is a database occurrence of this species approximately 5.5 miles upstream of the Study Area.
Amphibians and Reptiles				

Table 2. Special-status Wildlife with Documented Occurrences within a CNDDDB search of the U.S. Geological Survey (USGS) 7.5-minute quadrangles: San Jose West, Milpitas, Calaveras Reservoir, San Jose East, Santa Teresa Hills, Los Gatos, Castle Rock Ridge, Cupertino, and Mountain View

Common Name (<i>Scientific Name</i>)	Listing Status ^a	Geographic Distribution in California	Habitat Requirements	Potential Occurrence in the Study Area ^b
Alameda whipsnake (<i>Masticophis lateralis euryxanthus</i>)	FT, ST	Are found in the inner coast range of California, most Alameda whipsnakes area in Contra Costa and Alameda counties. Some have been found in San Joaquin and Santa Clara counties (USFWS 2017).	Typically found in chaparral – northern coastal sage scrub and coastal sage. Rock outcrops, rock crevices and mammal burrows are important features of their habitat.	Not Expected. The Study Area does not contain any of the typical habitat for this species. While all nearby documented occurrences have suppressed location information, they are all located in the Calaveras Reservoir USGS quadrangle, which is over 4 miles northeast of the Study Area at its nearest point.
California giant salamander (<i>Dicamptodon ensatus</i>)	CSSC	Found in two, possibly three isolated regions, from Mendocino County near Point Arena east into the coast ranges into Lake and Glenn counties, south to Sonoma and Marin Counties, continuing south of the San Francisco Bay from San Mateo County to southern Santa Cruz County. Does not occur east of the SF Bay (CalHerps 2018).	Occurs in wet coastal forests in or near clear, cold permanent and semi-permanent streams and seepages.	Not Expected. The Study Area does not contain the cold, rural streams that are typical habitat for this species. The nearest documented occurrence is over 8 miles southwest of the Study Area, in the rural hills outside of the greater San Jose area.

Table 2. Special-status Wildlife with Documented Occurrences within a CNDDDB search of the U.S. Geological Survey (USGS) 7.5-minute quadrangles: San Jose West, Milpitas, Calaveras Reservoir, San Jose East, Santa Teresa Hills, Los Gatos, Castle Rock Ridge, Cupertino, and Mountain View

Common Name (<i>Scientific Name</i>)	Listing Status ^a	Geographic Distribution in California	Habitat Requirements	Potential Occurrence in the Study Area ^b
California red-legged frog (<i>Rana draytonii</i>)	FT, CSSC	Endemic to California and northern Baja California.	Inhabits lowlands and foothills in or near permanent sources of deep water with dense, shrubby or emergent riparian vegetation. Requires 11-20 weeks of permanent water for larval development. Must have access to estivation habitat. Documented to move up to 2 miles between breeding locations.	Not Expected. This species was determined to be extirpated from the Santa Clara Valley and therefore has no potential to occur within the Study Area. In addition, the project is not within mapped breeding habitat within the Santa Clara Valley Habitat Plan and is approximately 8.5 miles from the nearest documented occurrences and approximately 3.5 miles from the mapped refugia or dispersal habitat

Table 2. Special-status Wildlife with Documented Occurrences within a CNDDDB search of the U.S. Geological Survey (USGS) 7.5-minute quadrangles: San Jose West, Milpitas, Calaveras Reservoir, San Jose East, Santa Teresa Hills, Los Gatos, Castle Rock Ridge, Cupertino, and Mountain View

Common Name (<i>Scientific Name</i>)	Listing Status ^a	Geographic Distribution in California	Habitat Requirements	Potential Occurrence in the Study Area ^b
California tiger salamander (<i>Ambystoma californiense</i>)	FT, ST, WL	Endemic to California, found in isolated populations the Central Valley and Central Coast ranges.	This species needs underground refuges, especially ground squirrel burrows, and vernal pools or other seasonal wetlands for breeding.	Not Expected. The Study Area does not contain suitable grassland habitat, contains a thick understory along the banks of Guadalupe River that would preclude this species' movement, and is isolated from occupied habitat by extensive urbanization that has created a permanent migratory barrier to this species. Like CRLF, this species is likely extirpated from the Santa Clara Valley region. In addition, the project is not within mapped breeding or non-breeding habitat in the Santa Clara Valley Habitat Plan and is approximately 2.5 miles from the nearest documented occurrence, though occurrences within this area are listed as "possibly extirpated" in the CNDDB.
coast horned lizard (<i>Phrynosoma blainvilli</i>)	CSSC	Throughout the San Joaquin Valley and the western 2/3 of California.	Frequents a wide variety of habitats, most common in lowlands along sandy washes with scattered low bushes. Open areas for sunning, bushes for cover, patches of loose soil for burial, and abundant supply of ants and other insects.	Not Expected. The Study Area does not contain any of the sandy wash and/or scrub habitat typical for this species. The nearest documented occurrence is over 10.5 miles southeast of the Study Area.

Table 2. Special-status Wildlife with Documented Occurrences within a CNDDDB search of the U.S. Geological Survey (USGS) 7.5-minute quadrangles: San Jose West, Milpitas, Calaveras Reservoir, San Jose East, Santa Teresa Hills, Los Gatos, Castle Rock Ridge, Cupertino, and Mountain View

Common Name (<i>Scientific Name</i>)	Listing Status ^a	Geographic Distribution in California	Habitat Requirements	Potential Occurrence in the Study Area ^b
foothill yellow-legged frog (<i>Rana boylei</i>)	SE, CSSC	Occurs in the foothills of the western side of the Sierra Nevada mountains from the northern border of the state to the Tehachapi mountains.	Inhabits partly shaded, shallow streams and riffles with a rocky substrate in a variety of habitats. Need at least some cobble-sized substrate for egg laying, need at least 15 weeks for metamorphosis.	Not Expected. This species is extirpated from the greater San Jose region due to heavy urbanization. The nearest extant documented occurrence is over 7 miles northeast of the Study Area, in the rural regions east of San Jose.
Northern California legless lizard (<i>Anniella pulchra</i>)	CSSC	Throughout central and southern California, west of the Sierra Nevada to coastal regions.	Sandy or loose loamy soils under sparse vegetation. Soil moisture is essential. They prefer soils with a high moisture content.	Not Expected. The Study Area does not contain any of the sandy wash and/or scrub habitat typical for this species. The only nearby documented occurrence is listed as possibly extirpated and is over 2.5 miles northeast of the Study Area.
Santa Cruz black salamander (<i>Aneides niger</i>)	CSSC	This subspecies is endemic to California, with a limited range west of the San Francisco Bay and south of the San Francisco Peninsula from Santa Cruz County and western Santa Clara County, north to southern San Mateo County. The species also occurs from Sonoma county north along the coast and coast ranges to southwest Oregon in Jackson and Josephine Counties, and east to near Mt. Shasta.	Occurs in mixed deciduous woodland, coniferous forests, coastal grasslands. Found under rocks near streams, in talus, under damp logs, and other objects.	Not Expected. The Study Area does not contain any of the woodland, coniferous forest, or coastal grassland habitat typical for this species. The nearest documented occurrence of this species is approximately 6 miles south of the Study Area and separated by intensive urbanization.

Table 2. Special-status Wildlife with Documented Occurrences within a CNDDDB search of the U.S. Geological Survey (USGS) 7.5-minute quadrangles: San Jose West, Milpitas, Calaveras Reservoir, San Jose East, Santa Teresa Hills, Los Gatos, Castle Rock Ridge, Cupertino, and Mountain View

Common Name (<i>Scientific Name</i>)	Listing Status ^a	Geographic Distribution in California	Habitat Requirements	Potential Occurrence in the Study Area ^b
Western pond turtle (<i>Emys marmorata</i>)	CSSC	Occurs from Oregon border of Del Norte and Siskiyou Counties south along the coast to San Francisco Bay, inland through the Sacramento Valley and on western slope of Sierra Nevada.	Inhabits ponds, marshes, rivers, streams, and irrigation canals with muddy or rocky bottoms and with watercress, cattails, water lilies, or other aquatic vegetation in woodlands, grasslands, and open forests.	<p>Low Potential. The Study Area is near, but not within mapped primary habitat for this species and the nearest documented occurrence is over 3 miles northeast of the Study Area. Guadalupe River is not included in mapped habitat for WPT, likely due to the river's highly urbanized characteristics. While there is some hydrological connection to occupied watersheds nearby, the reach of Guadalupe River that contains the Study Area is separated by heavy urbanization and hydrological infrastructure, including reaches of concrete channelization that substantially alter flow speed and force, creating unfavorable conditions for this species to swim. In addition, multiple life stages of WPT are highly susceptible to competition and predation from urban invasive species that are frequently observed within the Guadalupe River watershed, including the red-eared slider (<i>Trachemys scripta elegans</i>) and American bullfrog (<i>Lithobates catesbeianus</i>).</p>

Table 2. Special-status Wildlife with Documented Occurrences within a CNDDDB search of the U.S. Geological Survey (USGS) 7.5-minute quadrangles: San Jose West, Milpitas, Calaveras Reservoir, San Jose East, Santa Teresa Hills, Los Gatos, Castle Rock Ridge, Cupertino, and Mountain View

Common Name (<i>Scientific Name</i>)	Listing Status ^a	Geographic Distribution in California	Habitat Requirements	Potential Occurrence in the Study Area ^b
Birds				
Alameda song sparrow (<i>Melospiza melodia pusillula</i>)	CSSC	This California endemic subspecies of song sparrow (<i>Melospiza melodia</i>) is a resident of salt marshes bordering south arm of San Francisco Bay.	Inhabits <i>Salicornia</i> marshes, nests low in <i>Grindelia</i> bushes (high enough to escape high tides) and in <i>Salicornia</i> .	Not Expected. The Study Area does not contain the marsh habitat typically utilized by this species and is 8.5 miles upstream of the San Francisco Bay, where this species typically lives. The nearest documented occurrence is over 7.5 miles northwest of the Study Area.
American peregrine falcon (<i>Falco peregrine anatus</i>)	CFP	Occurs throughout the Central Valley, coastal areas and northern mountains of California.	Riparian areas, wetlands, lakes and other aquatic features provide important breeding and foraging habitat for this species. Nests on cliffs or man-made structures such as buildings and bridges; feeds on birds.	Low Potential. This species may occasionally roost or forage within the Study Area, however there is no suitable high-elevation habitat available for nesting.
Black skimmer (<i>Rynchops niger</i>)	CSSC	Occurs on most oceanic coasts throughout North America.	On open sandy beaches, on gravel or shell bars with sparse vegetation, or on mats of sea wrack (tide-stranded debris) in saltmarsh (Cornell Lab 2017).	Not Expected. The Study Area does not contain saltmarsh or any of the sandy beach or gravel bar habitat used by this species and is 8.5 miles inland from the estuarine San Francisco Bay. The only nearby documented occurrence is over 13.5 miles northwest of the Study Area.

Table 2. Special-status Wildlife with Documented Occurrences within a CNDDDB search of the U.S. Geological Survey (USGS) 7.5-minute quadrangles: San Jose West, Milpitas, Calaveras Reservoir, San Jose East, Santa Teresa Hills, Los Gatos, Castle Rock Ridge, Cupertino, and Mountain View

Common Name (<i>Scientific Name</i>)	Listing Status ^a	Geographic Distribution in California	Habitat Requirements	Potential Occurrence in the Study Area ^b
black swift (<i>Cypseloides niger</i>)	CSSC	Coastal belt of Santa Cruz and Monterey counties; central and southern Sierra Nevada; San Bernardino and San Jacinto mountains.	Breeds in small colonies on cliffs behind or adjacent to waterfalls in deep canyons and sea-bluffs above the surf; forages widely.	Not Expected. The Study Area does not contain any of the waterfall, deep canyon, or cliff habitat typical of this species. The nearest documented occurrence of this species is over 10 miles south of the Study Area.
burrowing owl (<i>Athene cunicularia</i>)	CSSC	Year-round resident throughout much of the State, except the coastal counties north of Marin and mountainous areas.	Occurs in open, dry annual or perennial grasslands, deserts and scrublands characterized by low growing vegetation. Nests in small mammal burrows, particularly those of the California ground squirrel.	Low Potential. The Study Area is generally either inundated with water or contains heavily saturated soils that are not suitable for small mammal burrow construction which is required for this species. A small amount of ruderal and park habitat dry enough for the species occurs in the southeast portion of the Study Area, adjacent to the curve of Mclellan Avenue. Due to the small area and urban location there is a low potential for burrowing owl to occur in the Study Area.

Table 2. Special-status Wildlife with Documented Occurrences within a CNDDDB search of the U.S. Geological Survey (USGS) 7.5-minute quadrangles: San Jose West, Milpitas, Calaveras Reservoir, San Jose East, Santa Teresa Hills, Los Gatos, Castle Rock Ridge, Cupertino, and Mountain View

Common Name (<i>Scientific Name</i>)	Listing Status ^a	Geographic Distribution in California	Habitat Requirements	Potential Occurrence in the Study Area ^b
California black rail (<i>Laterallus jamaicensis</i> ssp. <i>coturniculus</i>)	ST, CFP	This California endemic subspecies of the black rail (<i>Laterallus jamaicensis</i>) occurs in the San Francisco Bay region, parts of the Central Valley and at the southeastern border of the State.	Inhabits freshwater marshes, wet meadows and shallow margins of saltwater marshes bordering larger bays. It needs water depths of about 1 inch that do not fluctuate during the year and dense vegetation for nesting habitat.	Not Expected. The Study Area does not provide either foraging or nesting habitat for this species. There is no emergent wetland, cordgrass, or tidal slough habitat typical for this species and the Study Area is approximately 8.5 miles inland from the San Francisco Bay, where such habitat exists. The nearest documented occurrence of this species is over 9 miles northwest of the Study Area, along the San Francisco Bay.
California least tern (<i>Sternula antillarum browni</i>)	FE, SE, CFP	Nests along the coast from San Francisco Bay south to Northern Baja California.	Colonial breeder on bare or sparsely vegetated flat substrates, sandy beaches, alkali flats, landfills, or paved areas.	Not Expected. The Study Area is approximately 8.5 miles inland from the San Francisco Bay and aquatic habitat is entirely freshwater with abundant adjacent riparian vegetation, unlikely to support this species. In addition, due to the listing status of this species, it is well-documented within California. The nearest documented colony is approximately 20 miles northwest of the Study Area at Eden Landing Ecological Reserve in Union City, CA.

Table 2. Special-status Wildlife with Documented Occurrences within a CNDDDB search of the U.S. Geological Survey (USGS) 7.5-minute quadrangles: San Jose West, Milpitas, Calaveras Reservoir, San Jose East, Santa Teresa Hills, Los Gatos, Castle Rock Ridge, Cupertino, and Mountain View

Common Name (<i>Scientific Name</i>)	Listing Status ^a	Geographic Distribution in California	Habitat Requirements	Potential Occurrence in the Study Area ^b
California Ridgeway's rail (<i>Rallus obsoletus obsoletus</i>)	FE, SE, CFP	This California endemic inhabits salt water and brackish marshes traversed by tidal sloughs in the vicinity of the San Francisco Bay.	Associated with abundant growths of pickleweed. Also, feeds away from cover on invertebrates from mud-bottomed sloughs.	Not Expected. The Study Area does not provide either foraging or nesting habitat for this species. There is no emergent wetland, cordgrass, or tidal slough habitat typical for this species and the Study Area is approximately 8.5 miles inland from the San Francisco Bay, where such habitat exists. The nearest documented occurrence of this species is over 11 miles northwest of the Study Area, along the San Francisco Bay.
Cooper's hawk (<i>Accipiter cooperii</i>)	WL	Occurs throughout California, both in the breeding and non-breeding seasons.	Woodland, chiefly of open, interrupted or marginal type. Nest sites mainly in riparian growths of deciduous trees, as in canyon bottoms on river flood-plains; also, live oaks.	Moderate Potential. The Study Area provides suitable forage, roost, and nesting habitat for this species, which seems adapted to urban environments, although the homeless encampments in this reach of the river may discourage nesting. The nearest documented occurrence of this species is over 2.5 miles southwest of the Study Area.

Table 2. Special-status Wildlife with Documented Occurrences within a CNDDDB search of the U.S. Geological Survey (USGS) 7.5-minute quadrangles: San Jose West, Milpitas, Calaveras Reservoir, San Jose East, Santa Teresa Hills, Los Gatos, Castle Rock Ridge, Cupertino, and Mountain View

Common Name (<i>Scientific Name</i>)	Listing Status ^a	Geographic Distribution in California	Habitat Requirements	Potential Occurrence in the Study Area ^b
golden eagle (<i>Aquila chrysaetos</i>)	CFP	Occurs throughout California, both in the breeding and non-breeding seasons.	Rolling foothills, mountain areas, sage-juniper flats, and desert. Cliff-walled canyons provide nesting habitat in most parts of range; also, large trees in open areas.	Not Expected. The Study Area does not contain the vast open areas of suitable soaring, foraging, or roosting habitat typically utilized by this species. The nearest documented occurrence of this species is approximately 10 miles southeast of the Study Area.
northern harrier (<i>Circus cyaneus</i>)	CSSC	Occurs throughout lowland California; has been recorded in fall at high elevations	Inhabits grasslands, meadows, marshes, and seasonal and agricultural wetlands	Low Potential. This species may occasionally forage within the Study Area, but is unlikely to nest due to lack of large tracts of open grassland/marsh habitat and heavy adjacent urbanization. The nearest documented occurrence of this species is over 13 miles northwest of the Study Area.
osprey (<i>Pandion haliaetus</i>)	WL	Occurs throughout California, in the breeding, non-breeding, and migratory seasons.	Ocean shore, bays, freshwater lakes, and larger streams. Large nests built in tree-tops within 15 miles of a good fish-producing body of water.	Low Potential. This species may occasionally forage and/or roost within the Study Area. However, the intense urbanization surrounding the Study Area likely precludes heavy use by this species. The nearest documented occurrence of this species is 12 miles southwest of the Study Area.

Table 2. Special-status Wildlife with Documented Occurrences within a CNDDDB search of the U.S. Geological Survey (USGS) 7.5-minute quadrangles: San Jose West, Milpitas, Calaveras Reservoir, San Jose East, Santa Teresa Hills, Los Gatos, Castle Rock Ridge, Cupertino, and Mountain View

Common Name (<i>Scientific Name</i>)	Listing Status ^a	Geographic Distribution in California	Habitat Requirements	Potential Occurrence in the Study Area ^b
purple martin (<i>Progne subis</i>)	CSSC	Breeds rarely in scattered pockets throughout northern California, primarily along the coast.	Inhabits woodlands, low elevation coniferous forest of Douglas-fir, ponderosa pine, and Monterey pine. Nests in old woodpecker cavities mostly; also in human-made structures. Nest often located in tall, isolated tree/snag.	Not Expected. The Study Area does not contain any of the preferred habitat for this species. The nearest documented occurrence of this species is approximately 11 miles south of the Study Area.
saltmarsh common yellow throat (<i>Geothlypis trichas sinuosa</i>)	CSSC	This subspecies of the common yellow throat (<i>Geothlypis trichas</i>) is endemic to the fresh and saltwater marshes of the San Francisco Bay region.	Requires thick, continuous cover down to water surface for foraging; and tall grasses, tule patches and willows for nesting.	Not Expected. The Study Area does not contain the marsh habitat typically utilized by this species and is 8.5 miles upstream of the San Francisco Bay, where this species typically inhabits. The nearest documented occurrence is approximately 9 miles north of the Study Area, along the margin of the San Francisco Bay.
Swainson's hawk (<i>Buteo swainsonii</i>)	ST	Occurs throughout the eastern 2/3 of California, with concentrated populations breeding within the Sacramento Delta region.	Breeds in grasslands with scattered trees, juniper-sage flats, riparian areas, savannahs, and agricultural or ranch lands with groves or lines of trees. Requires adjacent suitable foraging areas such as grasslands, or alfalfa or grain fields supporting rodent populations.	Not Expected. The Study Area does not contain any of the preferred habitat for this species and is far from the typical range of this species. The only nearby documented occurrence is listed as possibly extirpated and is over 3.5 miles northwest of the Study Area.

Table 2. Special-status Wildlife with Documented Occurrences within a CNDDDB search of the U.S. Geological Survey (USGS) 7.5-minute quadrangles: San Jose West, Milpitas, Calaveras Reservoir, San Jose East, Santa Teresa Hills, Los Gatos, Castle Rock Ridge, Cupertino, and Mountain View

Common Name (<i>Scientific Name</i>)	Listing Status ^a	Geographic Distribution in California	Habitat Requirements	Potential Occurrence in the Study Area ^b
Tricolored blackbird (<i>Agelaius tricolor</i>)	ST, CSSC	Permanent resident in Central Valley from Butte to Kern Counties; breeds at scattered coastal locations from Marin to San Diego Counties and at scattered locations in Lake, Sonoma, and Solano Counties; rare nester in Siskiyou, Modoc, and Lassen Counties.	Nests in dense colonies in emergent marsh vegetation, such as tules and cattails, or upland sites with blackberries, nettles, thistles, and grain fields; habitat must be large enough to support 50 pairs; probably requires water at or near the nesting colony.	Low Potential. The Study Area does not contain enough of the habitat required by this species for nesting. Adults may occasionally forage within the Study Area. The nearest documented occurrence of this species is over 4.5 miles east of the Study Area.
western snowy plover (<i>Charadrius alexandrinuss nivosus</i>)	FT, CSSC	The Pacific population of western snowy plover occurs along the entire coastline of California.	Occurs on sandy beaches, salt pond levees and shores of large alkali lakes. Needs sandy, gravelly, or friable soils for nesting.	Not Expected. The Study Area does not contain any of the sandy beach or gravel bar habitat typical of this species and is 8.5 miles inland from the estuarine San Francisco Bay. The only nearby documented occurrence is over 9 miles northwest of the Study Area, along the San Francisco Bay.
western yellow-billed cuckoo (<i>Coccyzus americanus occidentalis</i>)	FT, SE	Very rare in California. Occurs in isolated pockets along the San Joaquin Valley river basins and in the very southeast portion of the state.	Riparian forest nester, along the broad, lower flood-bottoms of larger river systems. Nests in riparian jungles of willow, often mixed with cottonwoods, with lower story of blackberry, nettles, or wild grape.	Not Expected. This species has been extirpated from the San Francisco Bay region. The only nearby documented occurrence is listed as extirpated.

Table 2. Special-status Wildlife with Documented Occurrences within a CNDDDB search of the U.S. Geological Survey (USGS) 7.5-minute quadrangles: San Jose West, Milpitas, Calaveras Reservoir, San Jose East, Santa Teresa Hills, Los Gatos, Castle Rock Ridge, Cupertino, and Mountain View

Common Name (<i>Scientific Name</i>)	Listing Status ^a	Geographic Distribution in California	Habitat Requirements	Potential Occurrence in the Study Area ^b
white-tailed kite (<i>Elanus leucurus</i>)	CFP	Year-round resident in lowland areas west of Sierra Nevada from head of Sacramento Valley south, including coastal valleys and foothills, to western San Diego County at Mexico border.	Inhabits low foothills or valley areas with valley or live oaks, riparian areas, and marshes near open grasslands that are used for foraging	Moderate Potential. This species may forage and nest within the Study Area, although surrounding urbanization may preclude much use. The nearest documented occurrence of this species is at the San Jose airport north of the Study Area.
Yellow rail (<i>Coturnicops noveboracensis</i>)	CSSC	Mostly through Canada, the Midwest, and southeast US. Small wintering population in the San Francisco Bay Area. Small breeding population on the California-Oregon border.	Shallow marshes, and wet meadows; in winter, drier freshwater and brackish marshes, as well as dense, deep grass, and rice fields (Cornell Lab 2017).	Not Expected. The Study Area does not provide either foraging or nesting habitat for this species. There is no emergent wetland, cordgrass, or tidal slough habitat typical for this species and the Study Area is approximately 8.5 miles inland from the San Francisco Bay, where such habitat exists. The nearest recent documented occurrence of this species is over 9 miles north of the Study Area, along the San Francisco Bay.
Mammals				

Table 2. Special-status Wildlife with Documented Occurrences within a CNDDDB search of the U.S. Geological Survey (USGS) 7.5-minute quadrangles: San Jose West, Milpitas, Calaveras Reservoir, San Jose East, Santa Teresa Hills, Los Gatos, Castle Rock Ridge, Cupertino, and Mountain View

Common Name (<i>Scientific Name</i>)	Listing Status ^a	Geographic Distribution in California	Habitat Requirements	Potential Occurrence in the Study Area ^b
American badger (<i>Taxidea taxus</i>)	CSSC	Occurs throughout California and the western United States and Canada.	Inhabits a variety of open habitats with friable soils.	Not Expected. The Study Area does not contain the vast amounts of open, friable soils required by this species. The nearest documented occurrence of this species is over 8 miles southeast of the Study Area, in the open space south of the greater San Jose area.
pallid bat (<i>Antrozous pallidus</i>)	CSSC	Throughout California except high Sierra from Shasta to Kern Counties and northwest coast, primarily at lower and mid-elevations	Inhabits deserts, grasslands, shrublands, woodlands, and forests. This species is most common in open dry habitats with rocky areas for roosting. Roosts must protect bats from high temperatures, very sensitive to disturbance of roosting sites.	Not Expected. This species may occasionally pass through the Study Area, but is unlikely to roost due to the small amount of riparian vegetation and intensive surrounding urbanization. The nearest recent documented occurrence of this species is over 6.5 miles south of the Study Area.
Salt marsh wandering shrew (<i>Sorex vagrans halicoetes</i>)	CSSC	Endemic to the salt marshes of the south arm of the San Francisco Bay.	Inhabits medium-high marsh 6-8 feet above sea level where abundant driftwood is scattered among <i>Salicornia</i> .	Not Expected. The Study Area does not contain any of the marsh habitat required by this species and is 8.5 miles inland from the San Francisco Bay. The nearest documented occurrence of this species is over 8.5 miles northwest of the Study Area, along the margins of the San Francisco Bay.

Table 2. Special-status Wildlife with Documented Occurrences within a CNDDDB search of the U.S. Geological Survey (USGS) 7.5-minute quadrangles: San Jose West, Milpitas, Calaveras Reservoir, San Jose East, Santa Teresa Hills, Los Gatos, Castle Rock Ridge, Cupertino, and Mountain View

Common Name (<i>Scientific Name</i>)	Listing Status ^a	Geographic Distribution in California	Habitat Requirements	Potential Occurrence in the Study Area ^b
saltmarsh harvest mouse (<i>Reithrodontomys raviventris</i>)	FE, SE, CFP	This California endemic occurs only in the saline emergent wetlands of the San Francisco Bay and its tributaries.	Pickleweed is the primary habitat of this non-burrowing mammal. It builds loosely organized nests and requires higher areas to escape flooding.	Not Expected. The Study Area does not contain any of the marsh habitat required by this species and is 8.5 miles inland from the San Francisco Bay. The nearest documented occurrence of this species is over 9 miles northwest of the Study Area, along the margins of the San Francisco Bay.
San Francisco dusky-footed woodrat (<i>Neotoma fuscipes annectens</i>)	CSSC	This California endemic is found throughout the San Francisco Bay area in grasslands, scrub and wooded areas.	Forest habitats of moderate canopy and moderate to dense understory. May prefer chaparral and redwood habitats. Constructs nests of shredded leaves, grass, and other material. May be limited by availability of nest-building materials.	Not Expected. The Study Area lacks the moderate to dense canopy of the riparian habitat that would support this species nesting. No woodrat houses have been found in the Study Area during site surveys. The nearest documented occurrence of this species is over 6 miles west of the Study Area.
Townsend's big-eared bat (<i>Corynorhinus townsendii</i>)	SC, CSSC	Throughout California in a wide variety of habitats; most common in mesic sites.	Requires caves, mines, tunnels, buildings, or other human-made structures for roosting, extremely sensitive to human disturbance.	Not Expected. This species may occasionally pass through the Study Area, but is unlikely to roost due to the small area and intensive surrounding urbanization. The nearest recent documented occurrence of this species is over 11 miles west of the Study Area, in the rural area west of San Jose.

^a Status explanations: Federal:	^b Potential Occurrence explanations: Present: Species was observed on the project site, or recent species records (within five years) from
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<p>FE = Listed as endangered under the Federal Endangered Species Act.</p> <p>FT = Listed as threatened under the Federal Endangered Species Act.</p> <p>FC = Candidate for listing under the federal Endangered Species Act</p> <p>State:</p> <p>SE= Listed as endangered under the California Endangered Species Act</p> <p>ST= Listed as threatened under the California Endangered Species Act</p> <p>SC= Candidate for listing under the California Endangered Species Act</p> <p>CSSC = Species of Special Concern designated by California Department of Fish and Game</p> <p>CFP = Fully Protected Species under California Fish and Game Code</p> <p>WL = California Department of Fish and Wildlife Watch List</p>	<p>literature are known within the study area.</p> <p>High: The CNDDDB or other reputable documents record the occurrence of the species off-site, but within a 10-mile radius of the study area and within the last 10 years. High-quality suitable habitat is present within the study area.</p> <p>Moderate: Species does not meet all terms of High or Low category. For example: CNDDDB or other reputable documents may record the occurrence of the species near but beyond a 10-mile radius of the study area, or some of the components representing suitable habitat are present within or adjacent to the study area, but the habitat is substantially degraded or fragmented.</p> <p>Low: The CNDDDB or other documents may or may not record the occurrence of the species within a 10-mile radius of the study area. However, few components of suitable habitat are present within or adjacent to the study area.</p> <p>Not Expected: CNDDDB or other documents do not record the occurrence of the species within or reasonably near the study area and within the last 10 years, and no or extremely few components of suitable habitat are present within or adjacent to the study area.</p>
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D.6 Santa Clara Valley Habitat Plan Protected Species Assessment

Guadalupe Bridges: Santa Clara Valley Habitat Plan Protected Species Overview

The Guadalupe Bridges project spans the Guadalupe River approximately 1.6 miles upstream of the confluence with Los Gatos Creek and 8.5 miles upstream of the confluence with Alviso Slough in San Francisco Bay. The study area contains the following habitat types: aquatic (riverine), riparian (cottonwood/willow), coast live oak woodland, ruderal, developed/landscaped, and seasonal wetland in a flood control basin (floodplain) north of the bridge project (Attachment 1).

The following are focus species within the Santa Clara Valley Habitat Plan (SCVHP), however they are not analyzed further in this assessment due to a combination of large geographic distance from the species' known occupied habitat and a lack of species' required habitat within or near the study area:

- Bay checkerspot butterfly (*Euphydryas editha bayensis*; Attachment 2)
- California tiger salamander (*Ambystoma californiense*; Attachment 3)
- California red-legged frog (*Rana draytonii*; Attachment 4)
- foothill yellow-legged frog (*Rana boylei*; Attachment 5)
- least Bell's vireo (*Vireo bellii pusillus*; Attachment 6)
- tricolored blackbird (*Agelaius tricolor*; Attachment 7)
- San Joaquin kit fox (*Vulpes macrotis mutica*; Attachment 8)
- Tiburon Indian paintbrush (*Castilleja affinis* ssp. *neglecta*; Attachment 9)
- coyote ceanothus (*Ceanothus ferrisiae*; Attachment 10)
- Mount Hamilton thistle (*Cirsium fontinale* var. *campylon*; Attachment 11)
- Santa Clara Valley dudleya (*Dudleya abramsii* ssp. *setchellii*; Attachment 12)
- fragrant fritillary (*Fritillaria liliacea* Lindl.; Attachment 13)
- Loma Prieta hoita (*Hoita strobilina*; Attachment 14)
- smooth lessingia (*Lessingia micradenia* var. *glabrata*; Attachment 15)
- Metcalf Canyon jewelflower (*Streptanthus albidus* ssp. *albidus*; Attachment 16)

The final remaining three SCVHP focal species—most beautiful jewelflower, western pond turtle, and western burrowing owl—were also determined to not have potential or have low potential to occur within the study area. However, due to the proximity of known occurrences to the study area, they are discussed further below.

PLANTS

Most beautiful jewelflower (*Streptanthus albidus* ssp. *peramoenus*; California Native Plant Society List 1B.2)

There is an unconfirmed "non-CNDDDB jewelflower" occurrence mapped within proximity of the study area (Attachment 17). However, the most beautiful jewelflower is closely associated with serpentine habitat. The study area is within the floodplain of the Guadalupe River, largely composed of alluvial soils that are heavily saturated and serpentine soils are not present in the study area. Therefore, most beautiful jewelflower has no potential to occur within the study

area. In addition, the project site is well outside of the mapped habitat and all other known occurrences of most beautiful jewelflower (Attachment 17).

REPTILES

Western pond turtle (*Clemmys marmorata*, also, *Emys marmorata*; WPT; California Species of Special Concern)

The study area is near, but not within mapped primary habitat for WPT and the nearest documented occurrence is over three miles northeast of the study area (Attachment 18). Guadalupe River is noticeably not included in mapped habitat for WPT, likely due to the river's highly urbanized characteristics. While there is some hydrological connection to occupied watersheds nearby, the reach of Guadalupe River that contains the study area is separated by heavy urbanization and hydrological infrastructure, including reaches of concrete channelization that substantially alter flow speed and force, creating unfavorable conditions for semi-aquatic species' (including WPT) swimming. In addition, multiple life stages of WPT are highly susceptible to competition and predation from urban invasive species that are frequently observed within the Guadalupe River watershed, including the red-eared slider (*Trachemys scripta elegans*)¹ and American bullfrog (*Lithobates catesbeianus*)². Therefore, western pond turtle has a low potential to occur within the study area.

BIRDS

Western burrowing owl (*Athene cunicularia hypugaea*; California Species of Special Concern)

The study area is near mapped overwintering habitat (Attachment 19). However, within the SCVHP area and throughout much of California, burrowing owls are known to be closely associated with California ground squirrel (*Otospermophilus beecheyi*), which are used both as a prey species and for their actual burrows as owl habitat³. The study area, in general, is either inundated with water or contains heavily saturated soils that are not suitable for small mammal burrow construction. However, there is a small amount of ruderal and open habitat above the line of inundation in the southeast portion of the study area, adjacent to the curve of McLellan Avenue and some residential landscaping, that is suitable to ground squirrel excavation and subsequently, potential burrowing owl colonization. Therefore, western burrowing owl has a low potential to occur within the study area.

¹ United States Geological Survey (USGS), 2020. NAS-Nonindigenous Aquatic Species: *Trachemys scripta*. Available at: <https://nas.er.usgs.gov/queries/CollectionInfo.aspx?SpeciesID=1259&status=0&fmb=0&pathway=0&HUCNumber=18050003> [Accessed May 2020].

² United States Geological Survey (USGS), 2020. NAS-Nonindigenous Aquatic Species: *Lithobates catesbeianus*. Available at: <https://nas.er.usgs.gov/queries/CollectionInfo.aspx?SpeciesID=71&State=CA&HUCNumber=18050003> [Accessed May 2020].

³ Santa Clara Valley Habitat Agency, 2012. Species Accounts. Available at: <https://scv-habitatagency.org/DocumentCenter/View/112/Appendix-D-Species-Accounts> [Accessed May 2020].



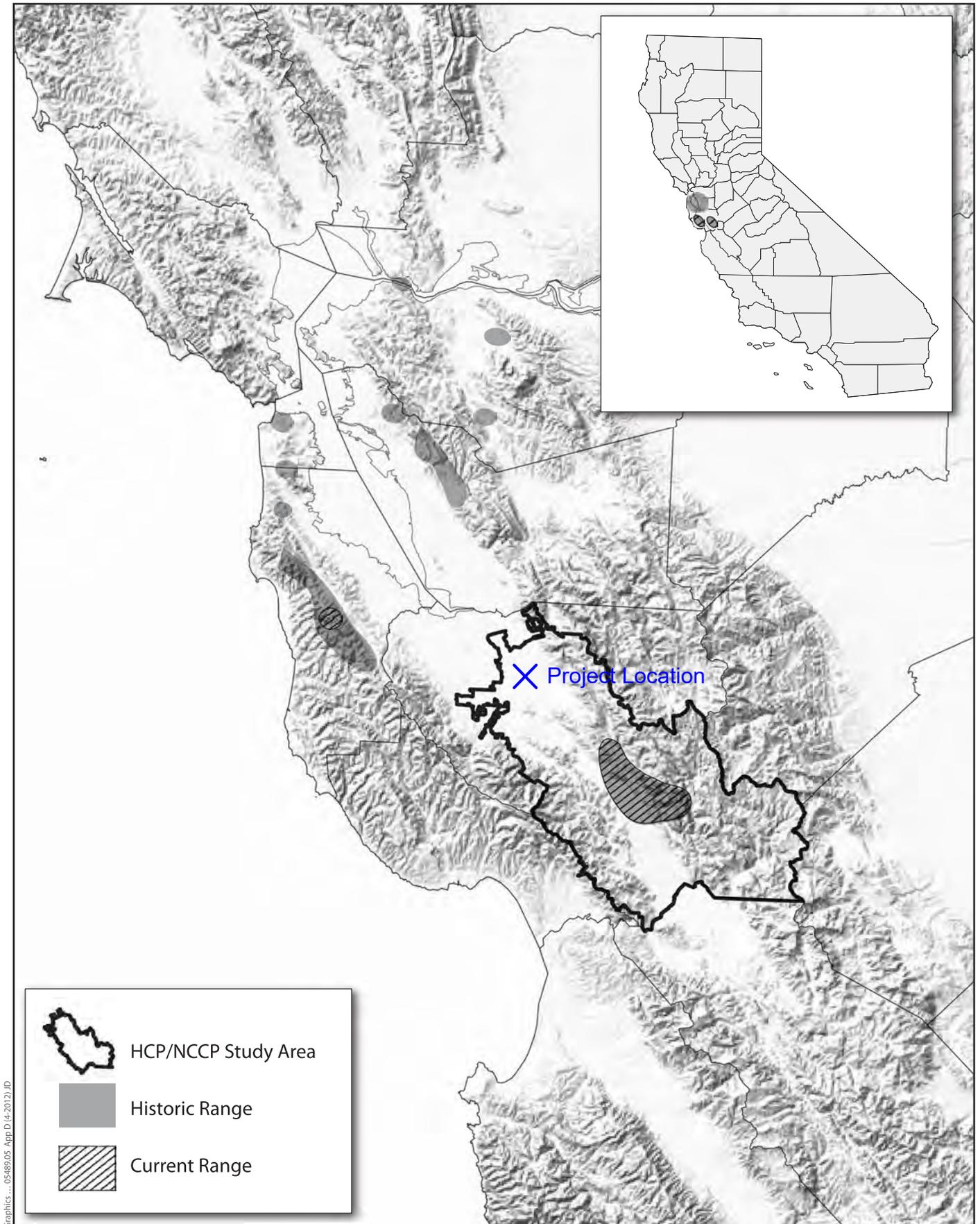
Source: ESRI, Google Earth, Louis Berger, MIG, SCVWD

- | | |
|---|---|
| Study Area (17.06 acres) | Coast Live Oak Woodland (0.38 acres) |
| Freshwater Perennial Marsh (1.61 acres) | Wild Oats and Annual Brome Grassland (4.59 acres) |
| Seasonal Wetland (1.33 acres) | Ornamental Woodland (1.25 acres) |
| Aquatic Habitat (0.73 acres) | Developed Land (5.04 acres) |
| Fremont Cottonwood Forest (2.13 acres) | |

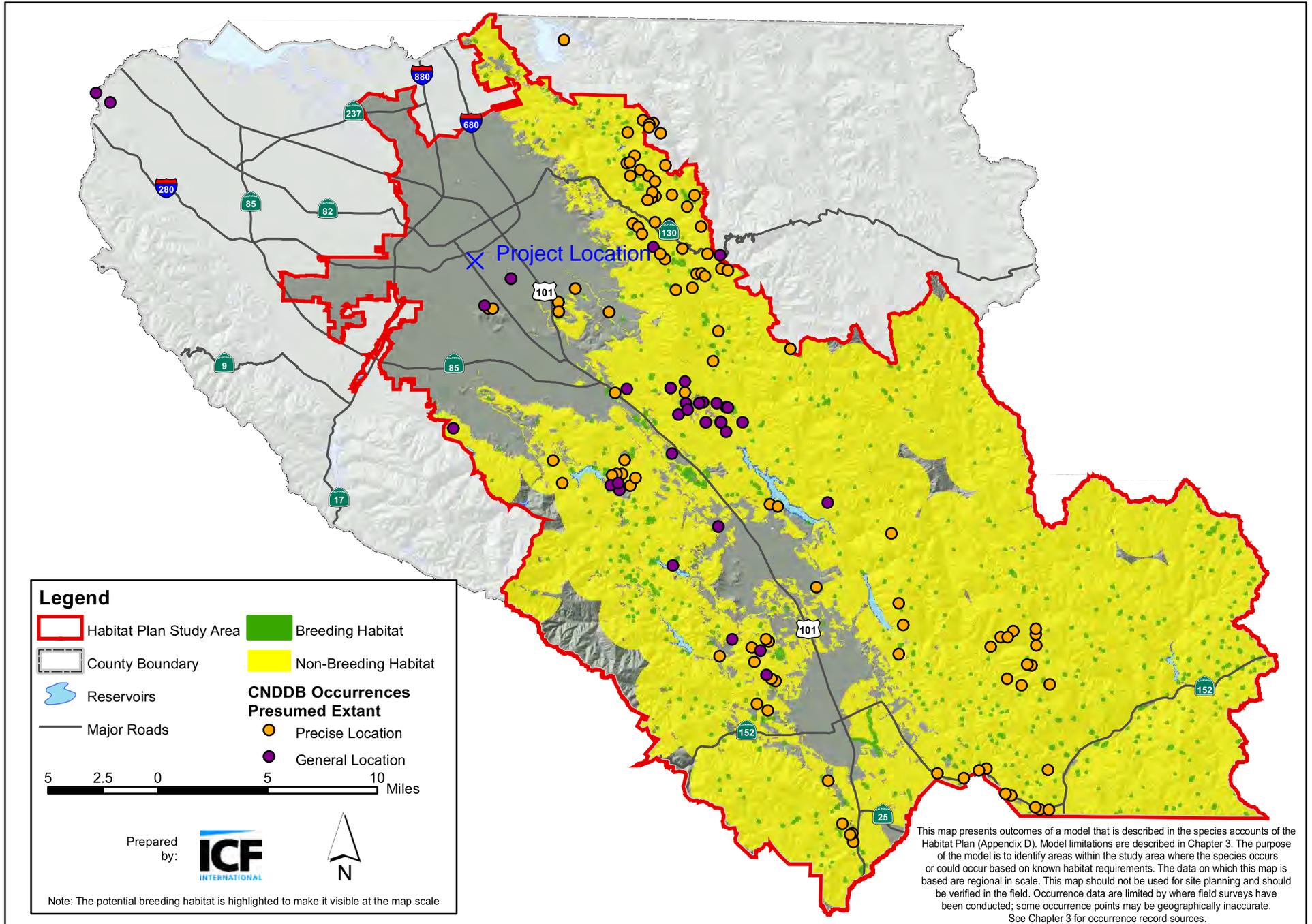


Attachment 1: Vegetation Communities Map

Guadalupe River Bridge Replacement Project

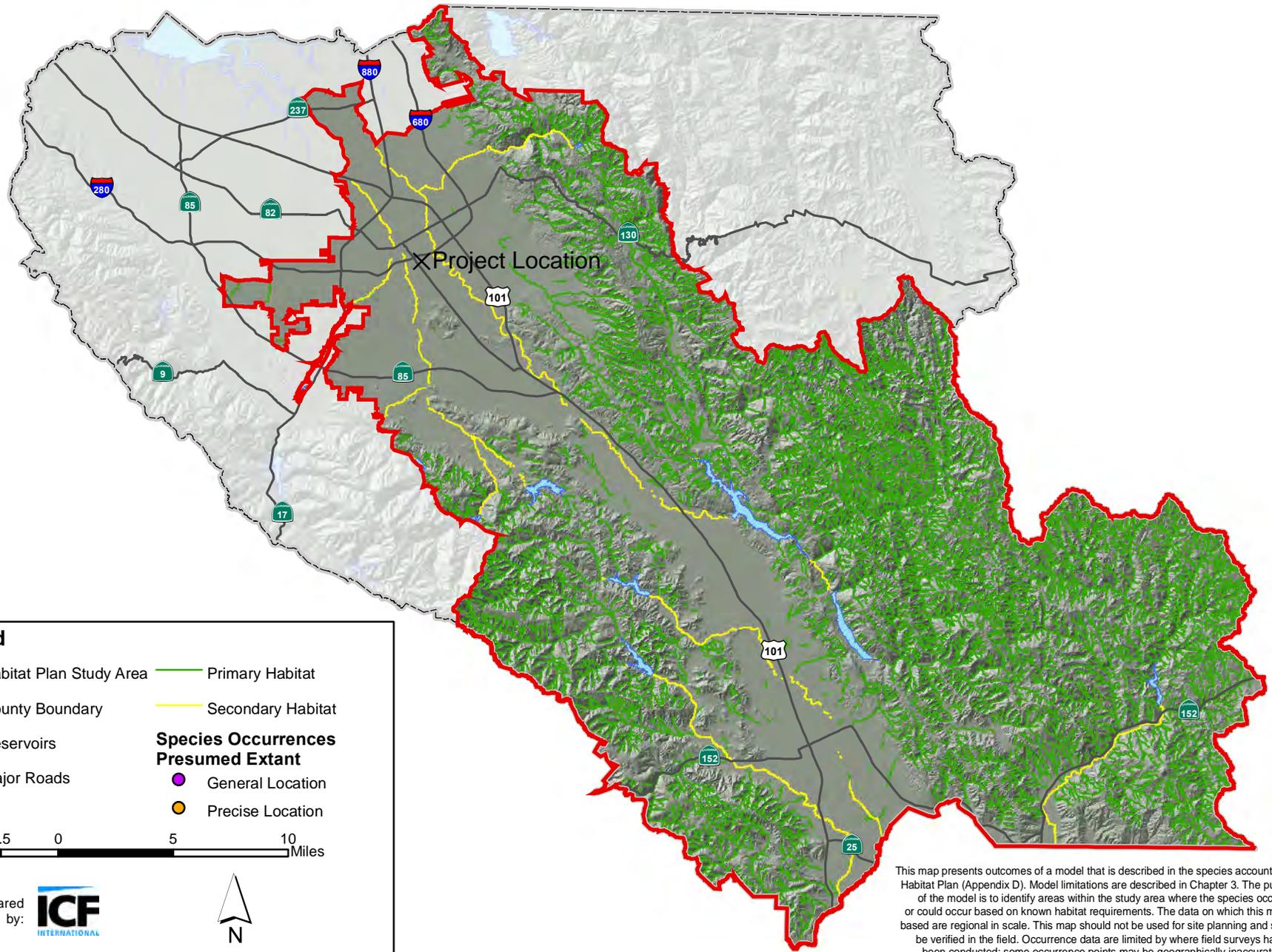


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This map presents outcomes of a model that is described in the species accounts of the Habitat Plan (Appendix D). Model limitations are described in Chapter 3. The purpose of the model is to identify areas within the study area where the species occurs or could occur based on known habitat requirements. The data on which this map is based are regional in scale. This map should not be used for site planning and should be verified in the field. Occurrence data are limited by where field surveys have been conducted; some occurrence points may be geographically inaccurate. See Chapter 3 for occurrence record sources.

O:\PROJECTS\SANTA CLARA\HCP\ISMR\01\ARCADMIN\HABITAT\MODELS\ANIMALS\20060601\F03_3_CTR_MODEL_5.MXD (04/25/12)



This map presents outcomes of a model that is described in the species accounts of the Habitat Plan (Appendix D). Model limitations are described in Chapter 3. The purpose of the model is to identify areas within the study area where the species occurs or could occur based on known habitat requirements. The data on which this map is based are regional in scale. This map should not be used for site planning and should be verified in the field. Occurrence data are limited to where field surveys have been conducted; some occurrence points may be geographically inaccurate. See Chapter 3 for occurrence record sources.

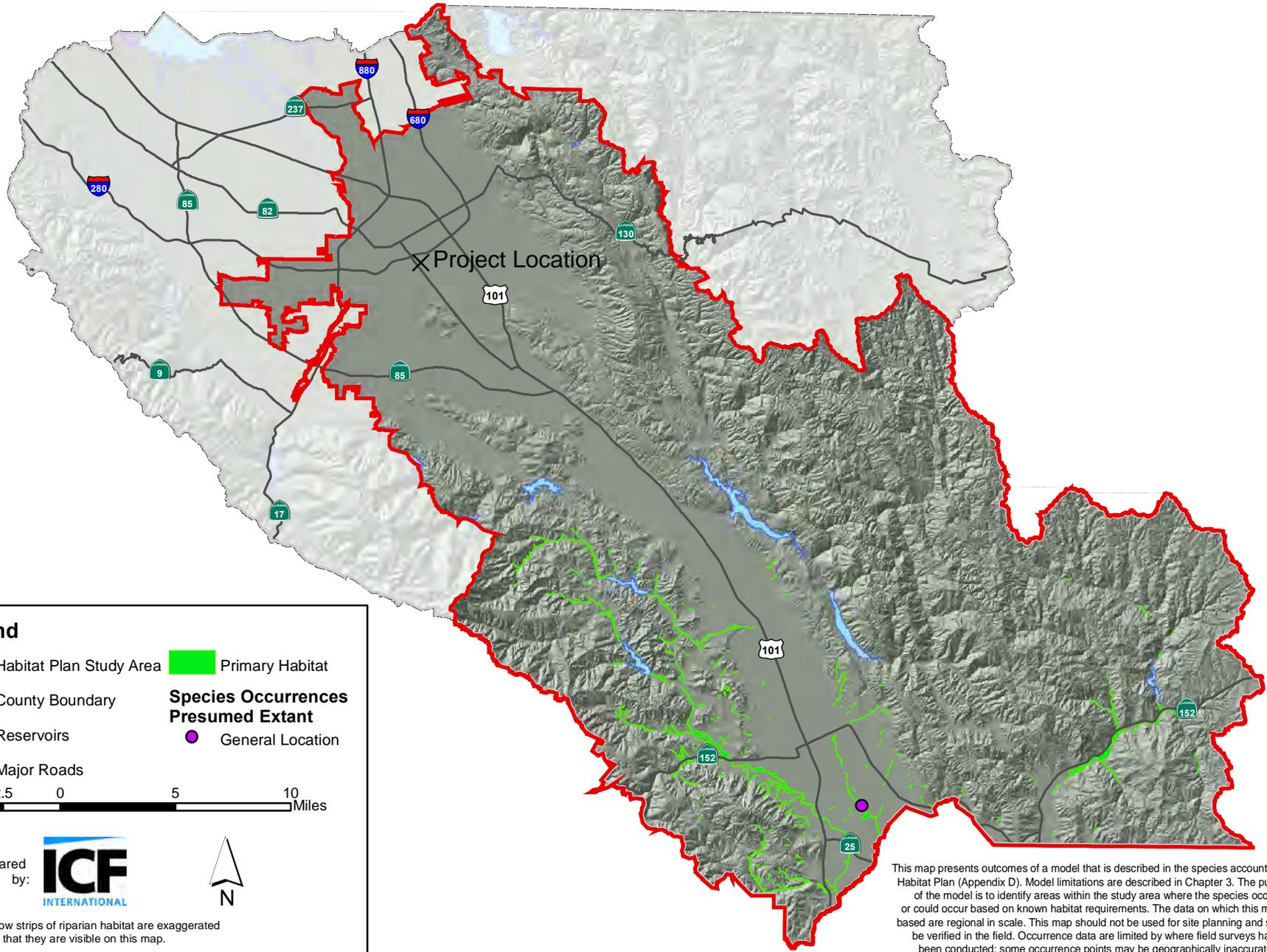
Legend

- Habitat Plan Study Area
 - County Boundary
 - Reservoirs
 - Major Roads
 - Primary Habitat
 - Secondary Habitat
- Species Occurrences Presumed Extant**
- General Location
 - Precise Location



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Legend

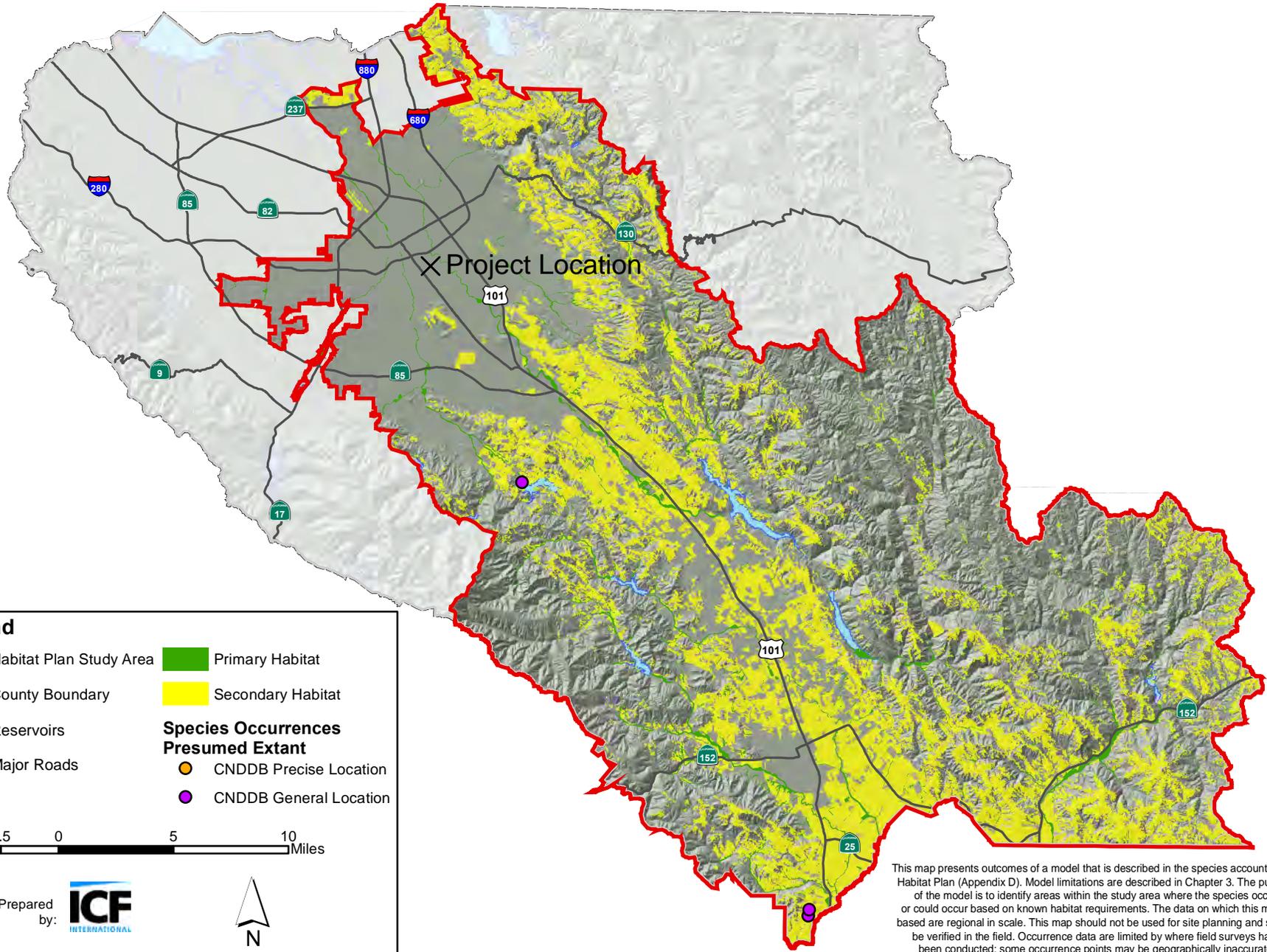
Habitat Plan Study Area	Primary Habitat
County Boundary	Species Occurrences Presumed Extant
Reservoirs	General Location
Major Roads	

5 2.5 0 5 10 Miles

Prepared by: **ICF INTERNATIONAL**

Note: Narrow strips of riparian habitat are exaggerated in scale so that they are visible on this map.

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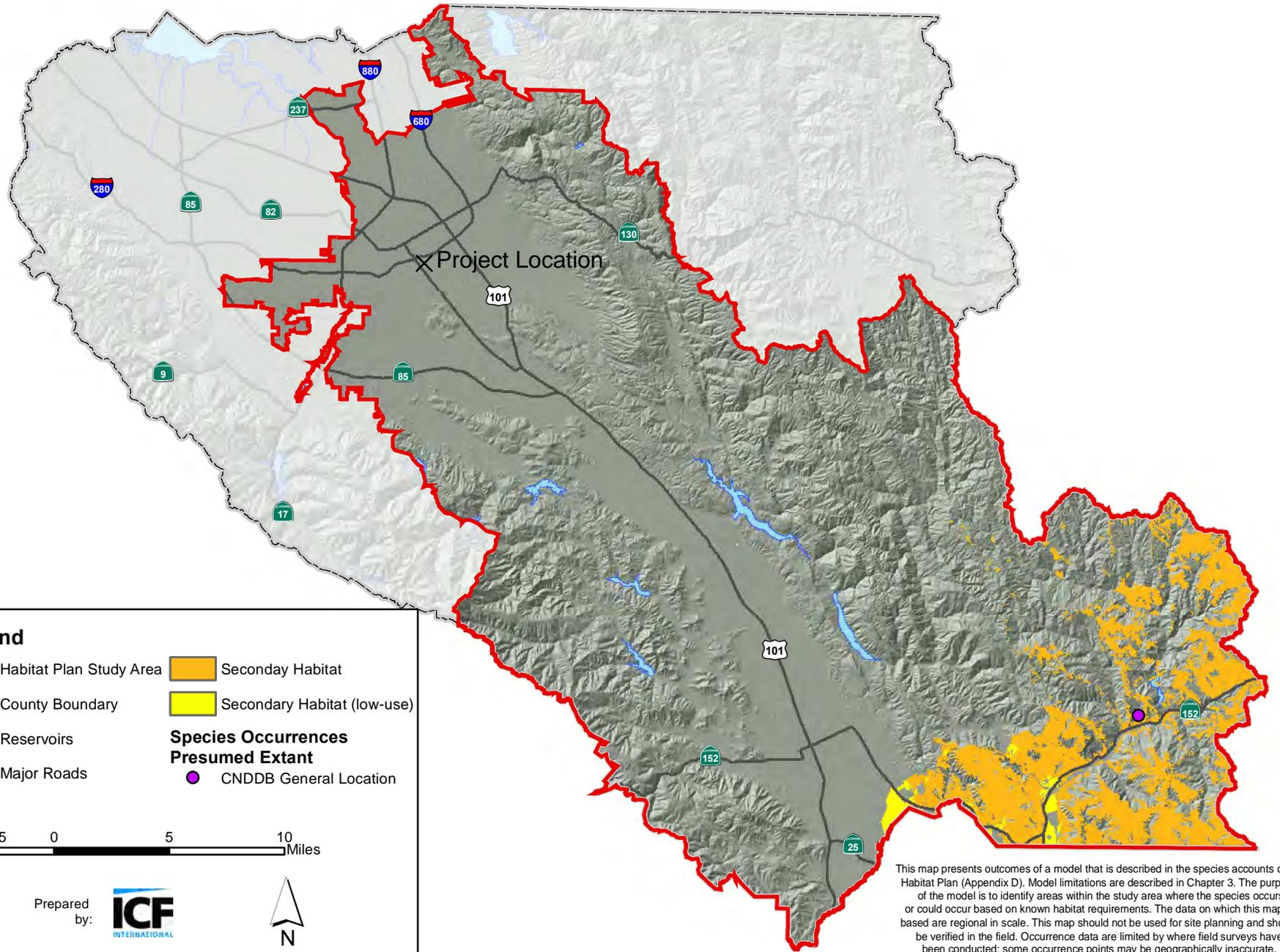
Legend

- Habitat Plan Study Area
 - County Boundary
 - Reservoirs
 - Major Roads
 - Primary Habitat
 - Secondary Habitat
- Species Occurrences Presumed Extant**
- CNDDDB Precise Location
 - CNDDDB General Location



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INTERNATIONAL

This map presents outcomes of a model that is described in the species accounts of the Habitat Plan (Appendix D). Model limitations are described in Chapter 3. The purpose of the model is to identify areas within the study area where the species occurs or could occur based on known habitat requirements. The data on which this map is based are regional in scale. This map should not be used for site planning and should be verified in the field. Occurrence data are limited to where field surveys have been conducted; some occurrence points may be geographically inaccurate. See Chapter 3 for occurrence record sources.



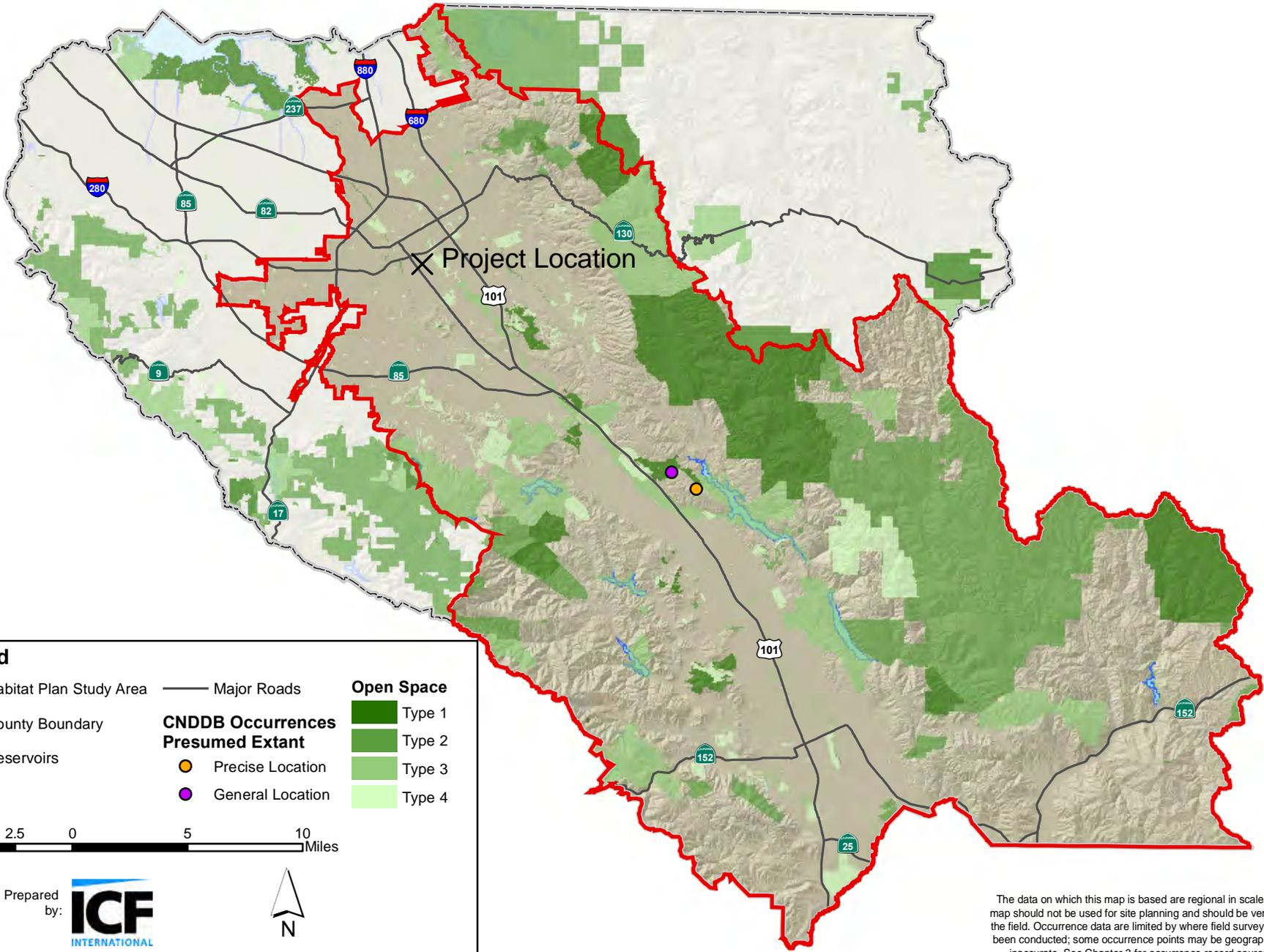
Legend

Habitat Plan Study Area	Secondary Habitat
County Boundary	Secondary Habitat (low-use)
Reservoirs	Species Occurrences
Major Roads	Presumed Extant
	CNDDB General Location

5 2.5 0 5 10 Miles

Prepared by:

This map presents outcomes of a model that is described in the species accounts of the Habitat Plan (Appendix D). Model limitations are described in Chapter 3. The purpose of the model is to identify areas within the study area where the species occurs or could occur based on known habitat requirements. The data on which this map is based are regional in scale. This map should not be used for site planning and should be verified in the field. Occurrence data are limited to where field surveys have been conducted; some occurrence points may be geographically inaccurate. See Chapter 3 for occurrence record sources.



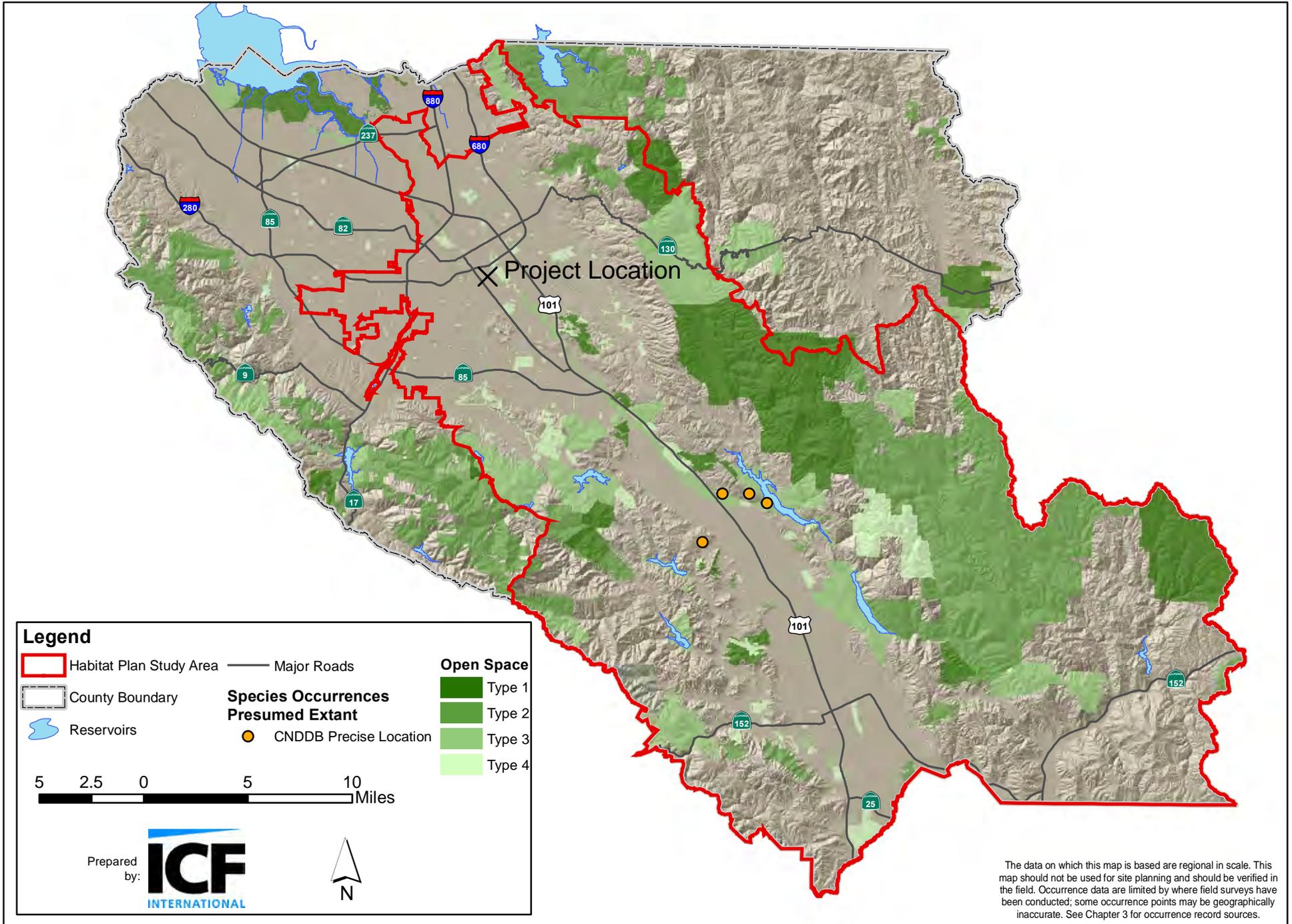
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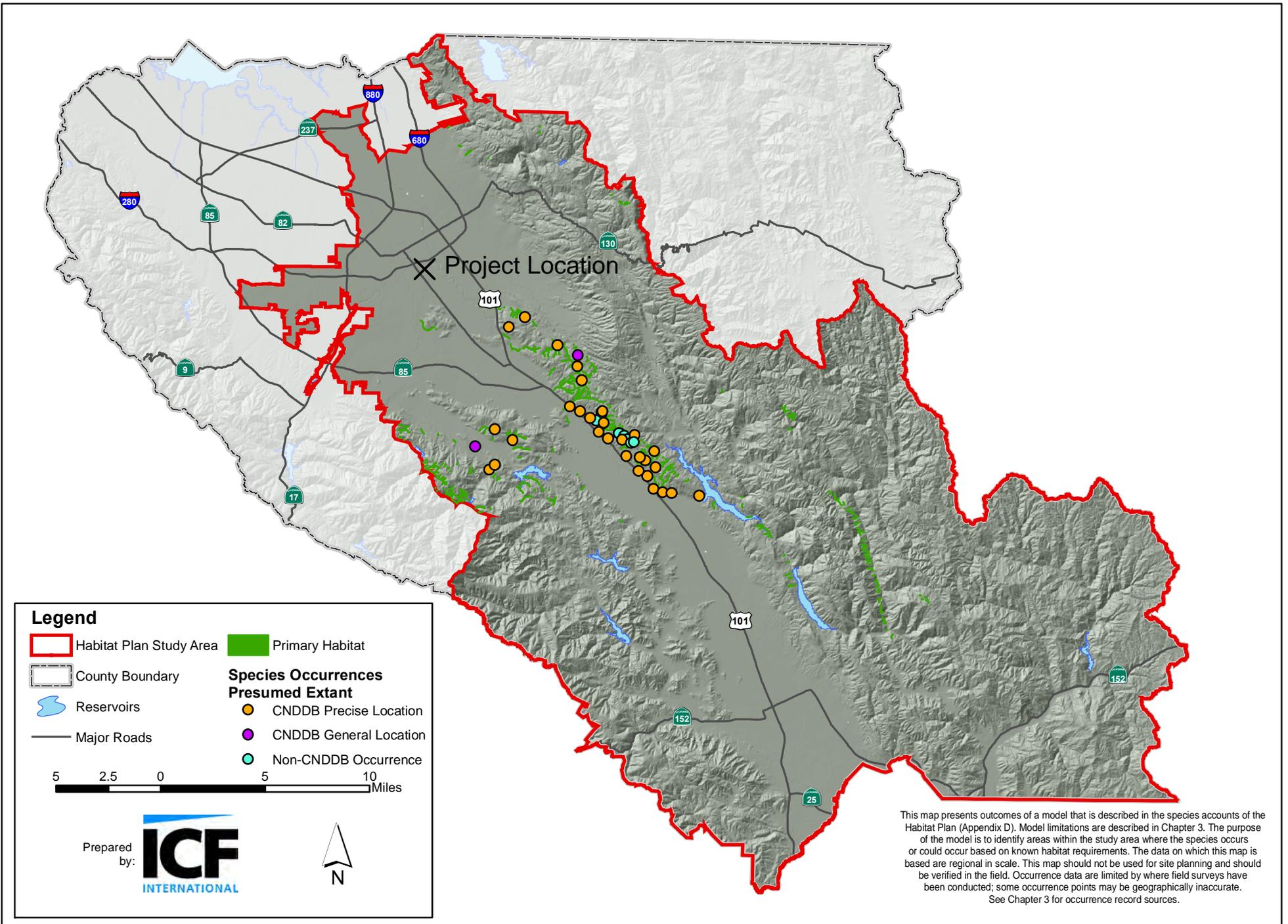
- Habitat Plan Study Area
- County Boundary
- Reservoirs
- Major Roads
- CNDDDB Occurrences Presumed Extant**
 - Precise Location
 - General Location
- Open Space**
 - Type 1
 - Type 2
 - Type 3
 - Type 4

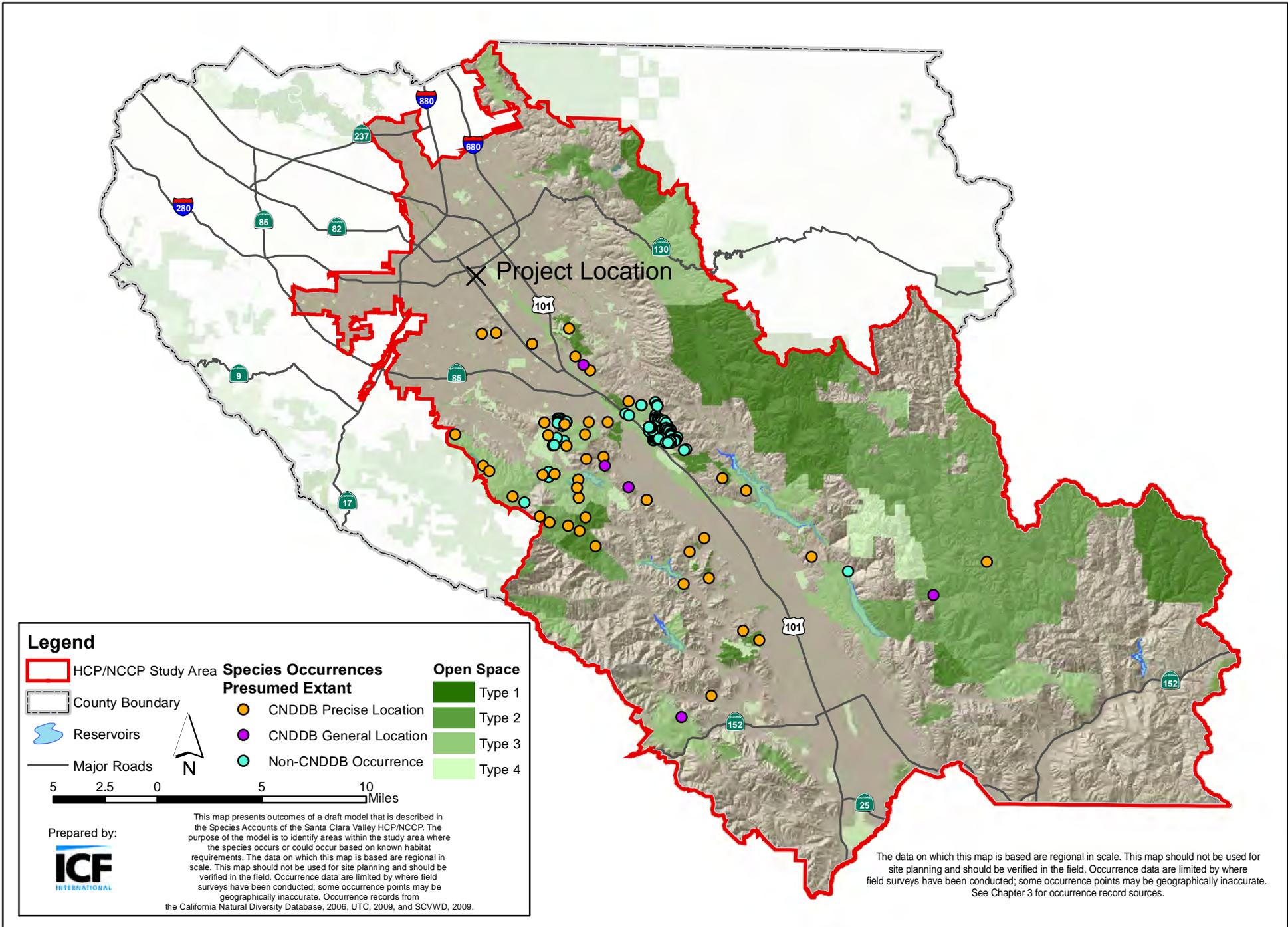
5 2.5 0 5 10 Miles



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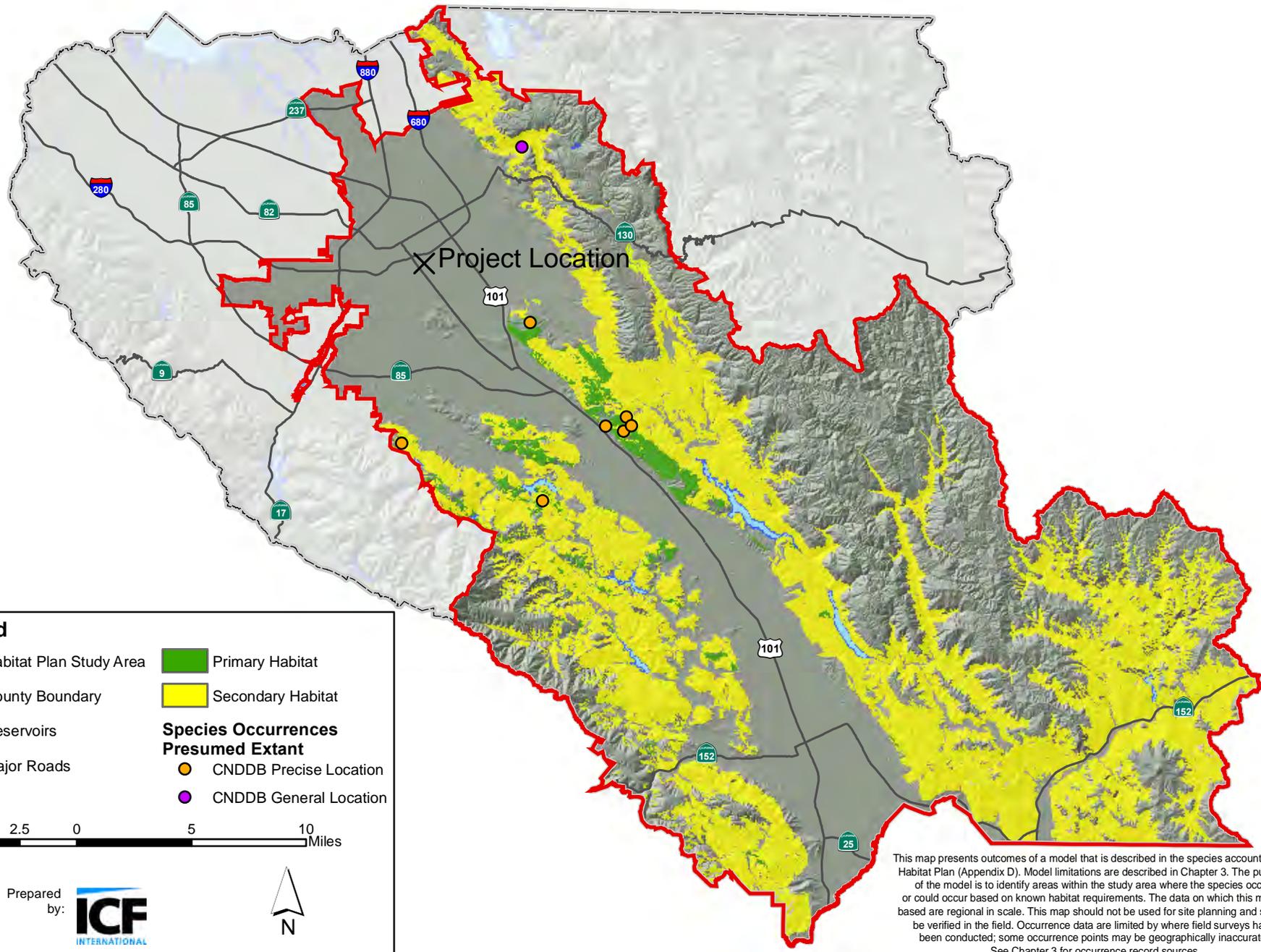
Legend

HCP/NCCP Study Area	Species Occurrences	Open Space
County Boundary	CNDDB Precise Location	Type 1
Reservoirs	CNDDB General Location	Type 2
Major Roads	Non-CNDDB Occurrence	Type 3
		Type 4

Prepared by:
 ICF INTERNATIONAL

This map presents outcomes of a draft model that is described in the Species Accounts of the Santa Clara Valley HCP/NCCP. The purpose of the model is to identify areas within the study area where the species occurs or could occur based on known habitat requirements. The data on which this map is based are regional in scale. This map should not be used for site planning and should be verified in the field. Occurrence data are limited by where field surveys have been conducted; some occurrence points may be geographically inaccurate. Occurrence records from the California Natural Diversity Database, 2006, UTC, 2009, and SCVWD, 2009.

The data on which this map is based are regional in scale. This map should not be used for site planning and should be verified in the field. Occurrence data are limited by where field surveys have been conducted; some occurrence points may be geographically inaccurate. See Chapter 3 for occurrence record sources.



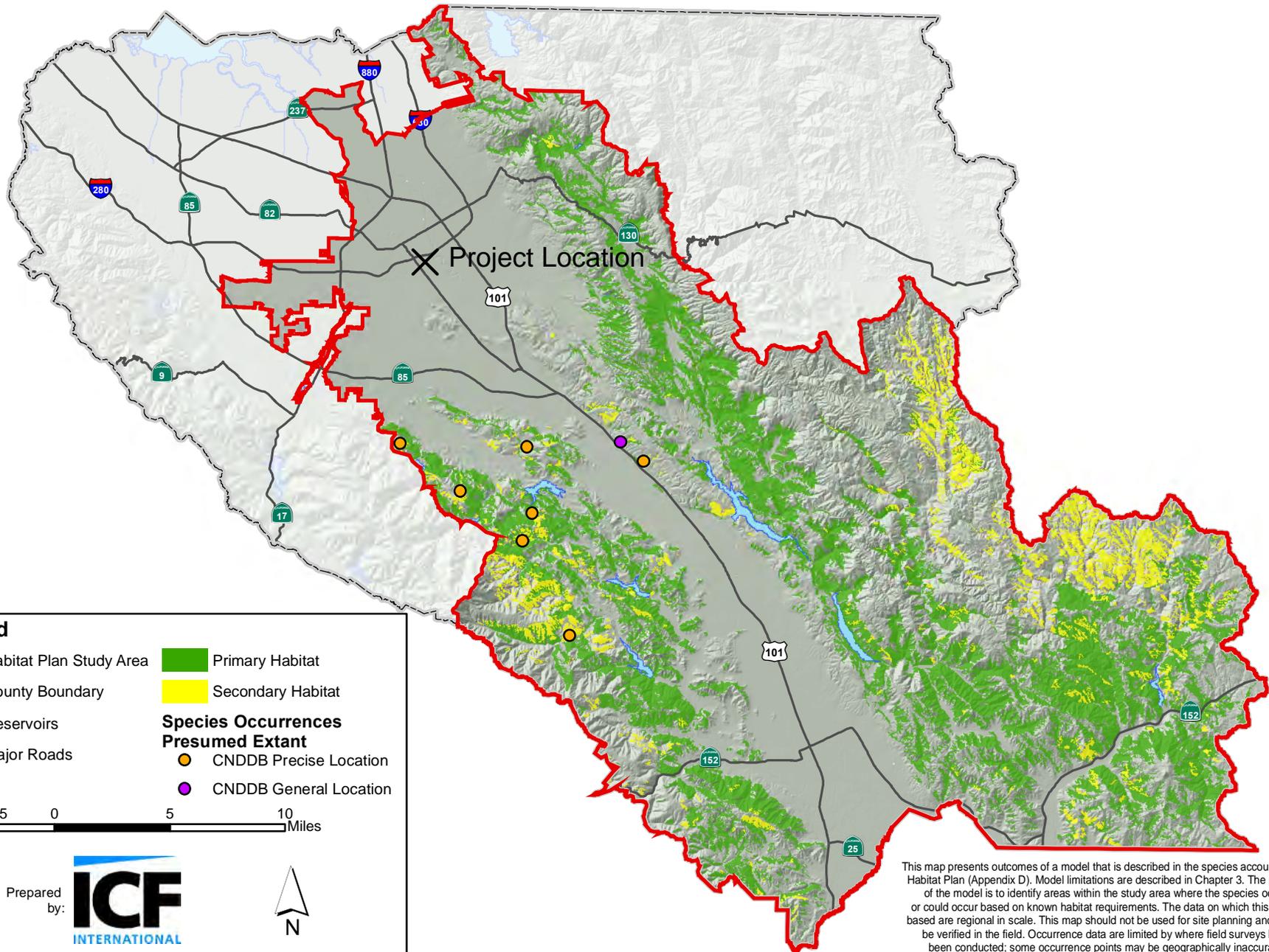
Legend

Habitat Plan Study Area	Primary Habitat
County Boundary	Secondary Habitat
Reservoirs	
Major Roads	
Species Occurrences Presumed Extant	
CNDDDB Precise Location	CNDDDB General Location

5 2.5 0 5 10 Miles

Prepared by:

This map presents outcomes of a model that is described in the species accounts of the Habitat Plan (Appendix D). Model limitations are described in Chapter 3. The purpose of the model is to identify areas within the study area where the species occurs or could occur based on known habitat requirements. The data on which this map is based are regional in scale. This map should not be used for site planning and should be verified in the field. Occurrence data are limited to where field surveys have been conducted; some occurrence points may be geographically inaccurate. See Chapter 3 for occurrence record sources.



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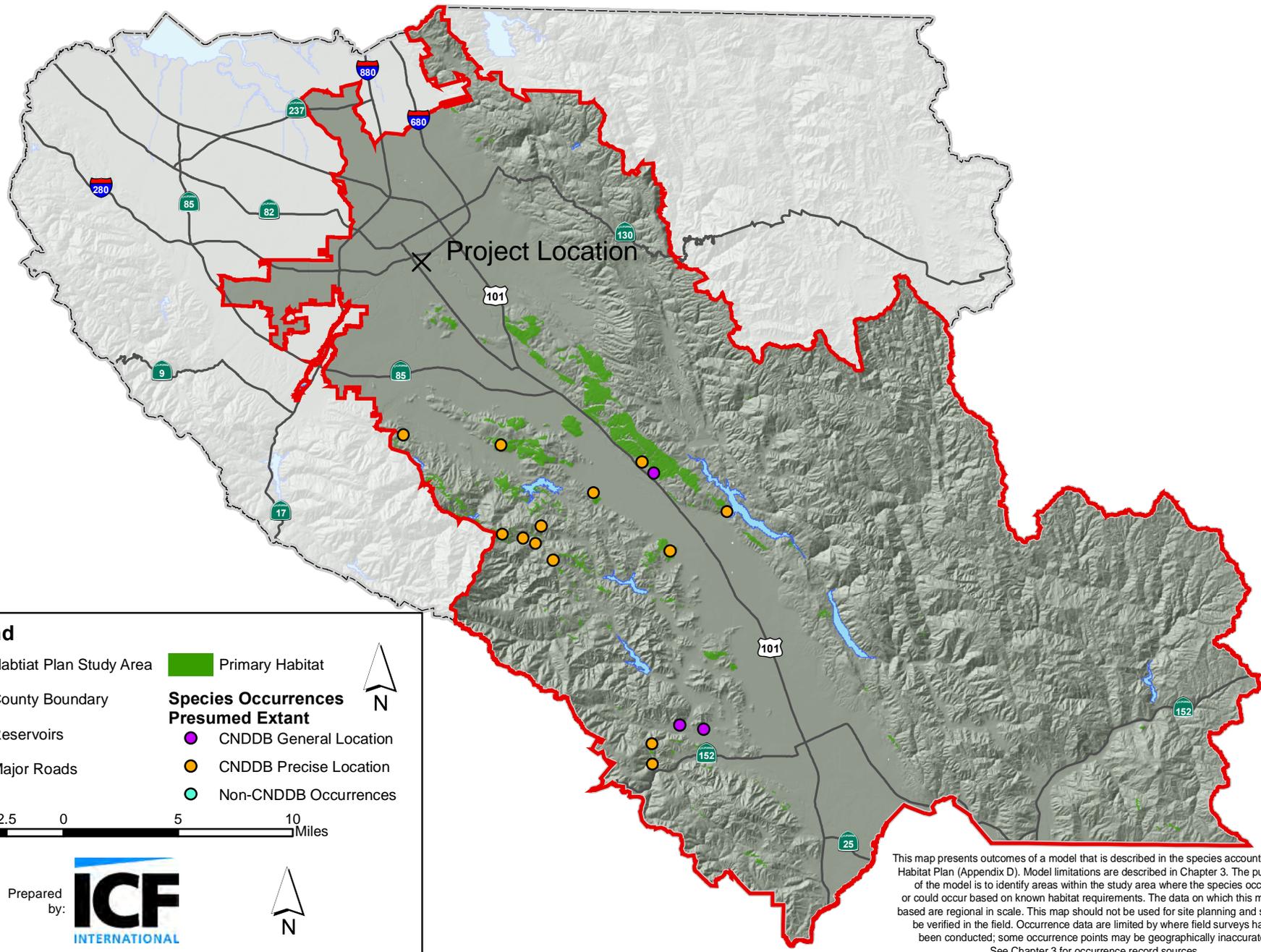
Habitat Plan Study Area	Primary Habitat
County Boundary	Secondary Habitat
Reservoirs	Species Occurrences Presumed Extant
Major Roads	
	CNDDDB General Location

5 2.5 0 5 10 Miles

Prepared by: **ICF** INTERNATIONAL

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This map presents outcomes of a model that is described in the species accounts of the Habitat Plan (Appendix D). Model limitations are described in Chapter 3. The purpose of the model is to identify areas within the study area where the species occurs or could occur based on known habitat requirements. The data on which this map is based are regional in scale. This map should not be used for site planning and should be verified in the field. Occurrence data are limited by where field surveys have been conducted; some occurrence points may be geographically inaccurate. See Chapter 3 for occurrence record sources.

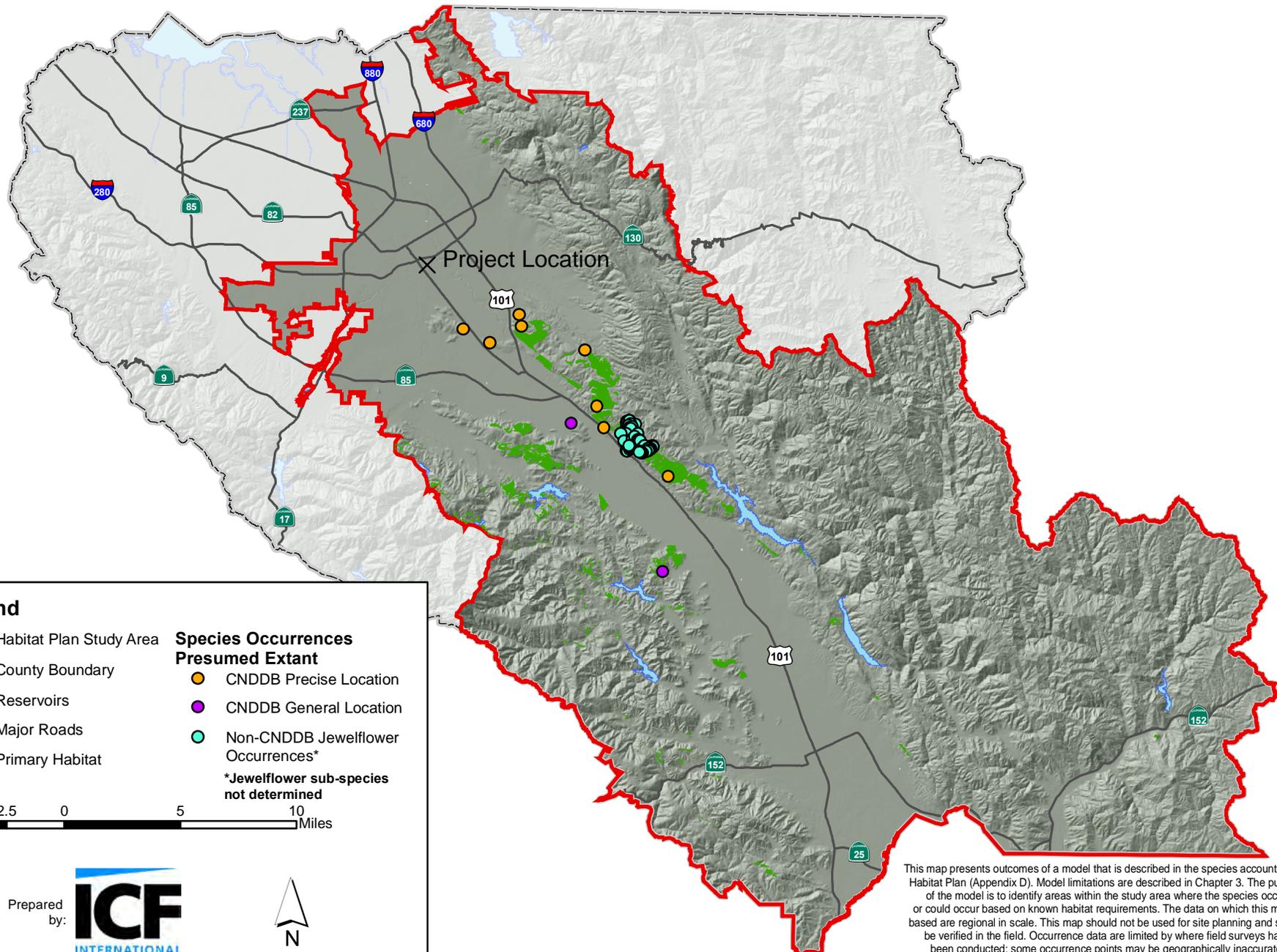


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Legend

Habitat Plan Study Area	Primary Habitat	
County Boundary	Species Occurrences Presumed Extant	
Reservoirs	CNDDDB General Location	
Major Roads	CNDDDB Precise Location	
	Non-CNDDDB Occurrences	

Prepared by: **ICF**
INTERNATIONAL



Legend

- Habitat Plan Study Area
- County Boundary
- Reservoirs
- Major Roads
- Primary Habitat

Species Occurrences Presumed Extant

- CNDDDB Precise Location
- CNDDDB General Location
- Non-CNDDDB Jewelflower Occurrences*

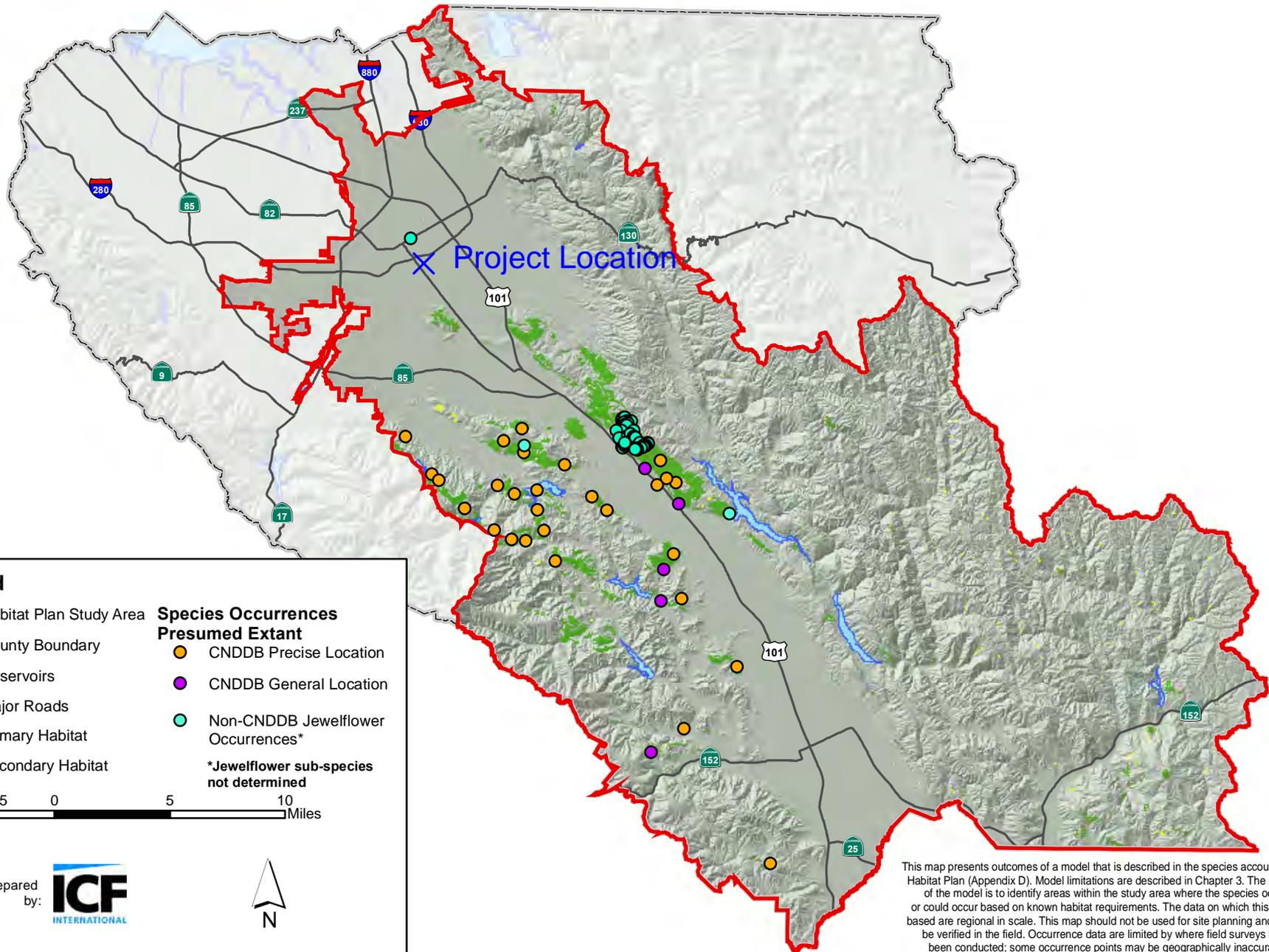
*Jewelflower sub-species not determined

5 2.5 0 5 10 Miles

Prepared by: **ICF**
INTERNATIONAL

N

This map presents outcomes of a model that is described in the species accounts of the Habitat Plan (Appendix D). Model limitations are described in Chapter 3. The purpose of the model is to identify areas within the study area where the species occurs or could occur based on known habitat requirements. The data on which this map is based are regional in scale. This map should not be used for site planning and should be verified in the field. Occurrence data are limited by where field surveys have been conducted; some occurrence points may be geographically inaccurate. See Chapter 3 for occurrence record sources.



Legend

- Habitat Plan Study Area
- County Boundary
- Reservoirs
- Major Roads
- Primary Habitat
- Secondary Habitat

Species Occurrences

- CNDDB Precise Location
- CNDDB General Location
- Non-CNDDB Jewelflower Occurrences*

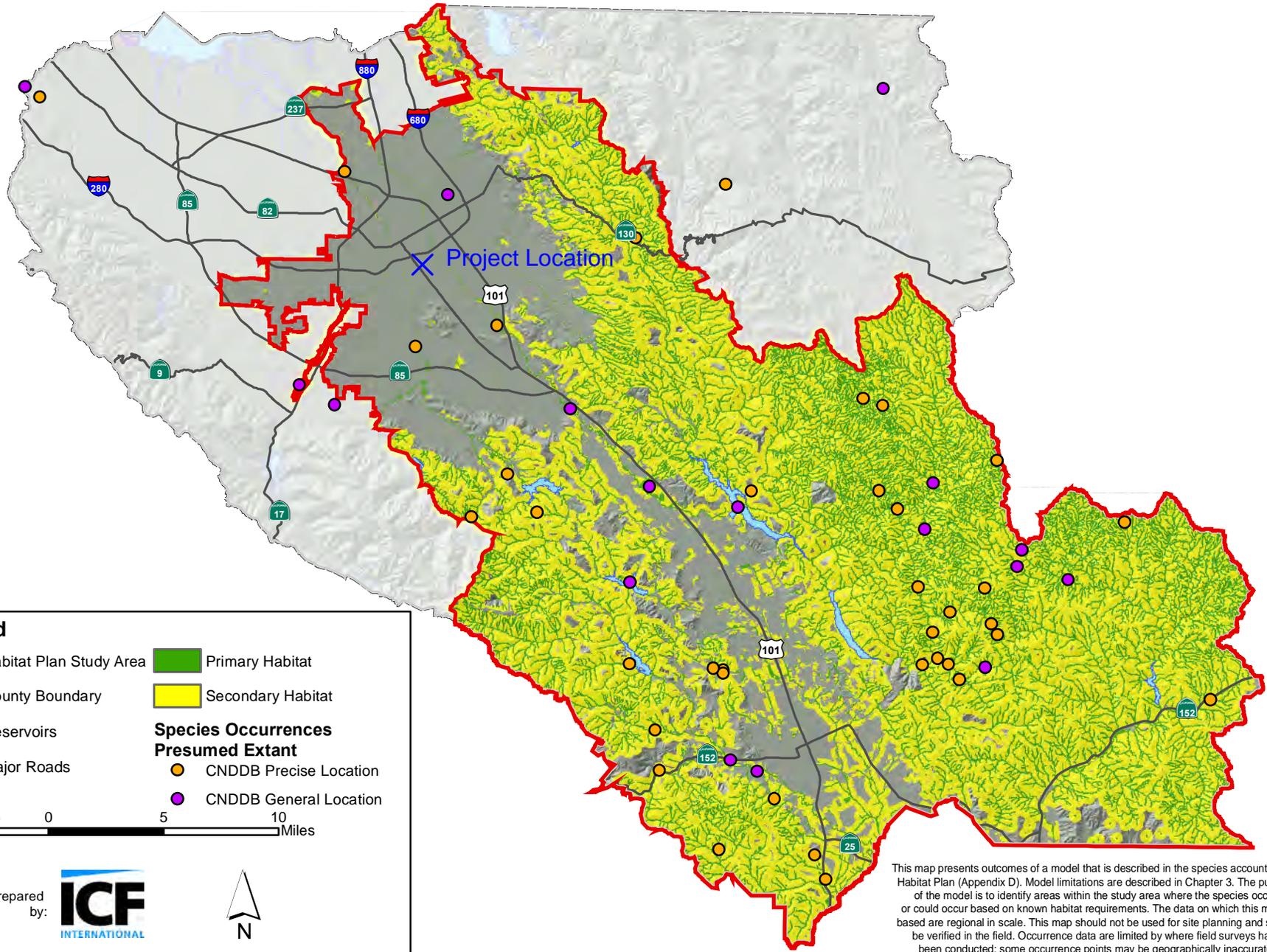
*Jewelflower sub-species not determined

5 2.5 0 5 10 Miles

Prepared by: **ICF** INTERNATIONAL

N

This map presents outcomes of a model that is described in the species accounts of the Habitat Plan (Appendix D). Model limitations are described in Chapter 3. The purpose of the model is to identify areas within the study area where the species occurs or could occur based on known habitat requirements. The data on which this map is based are regional in scale. This map should not be used for site planning and should be verified in the field. Occurrence data are limited by where field surveys have been conducted; some occurrence points may be geographically inaccurate. See Chapter 3 for occurrence record sources.



Legend

Habitat Plan Study Area	Primary Habitat
County Boundary	Secondary Habitat
Reservoirs	
Major Roads	

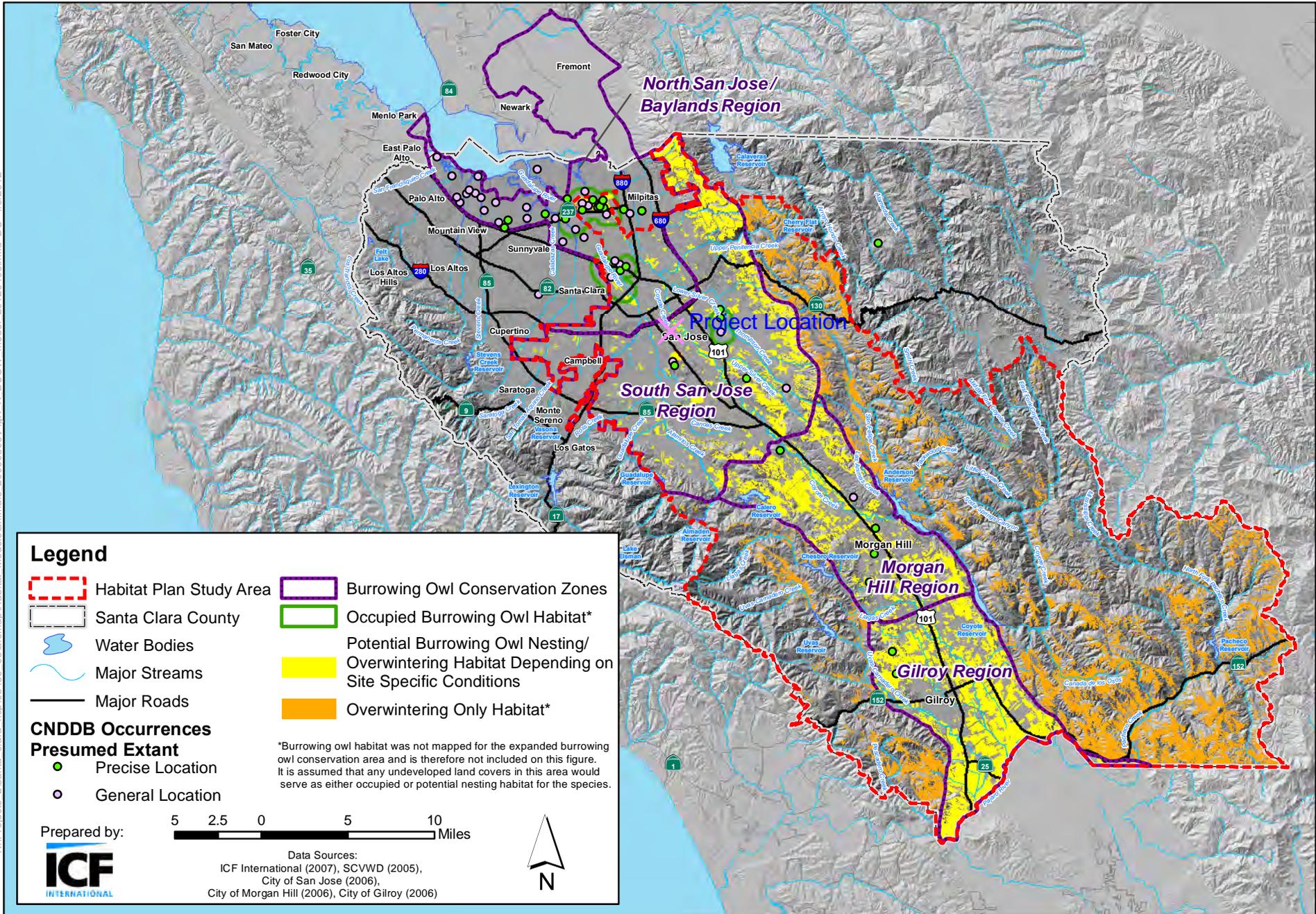
Species Occurrences Presumed Extant

CNDDDB Precise Location
CNDDDB General Location

5 2.5 0 5 10 Miles

Prepared by: ICF INTERNATIONAL

This map presents outcomes of a model that is described in the species accounts of the Habitat Plan (Appendix D). Model limitations are described in Chapter 3. The purpose of the model is to identify areas within the study area where the species occurs or could occur based on known habitat requirements. The data on which this map is based are regional in scale. This map should not be used for site planning and should be verified in the field. Occurrence data are limited to where field surveys have been conducted; some occurrence points may be geographically inaccurate. See Chapter 3 for occurrence record sources.



Attachment 19
Burrowing Owl Modeled Habitat Distribution - Santa Clara Valley Habitat Plan