

APPENDIX I

**USFWS SPECIES LIST AND
LIKELY SPECIES OCCURRENCE WITHIN THE
BIOLOGICAL STUDY AREA**

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U.S. Fish & Wildlife Service

IPaC Trust Resources Report



NAME

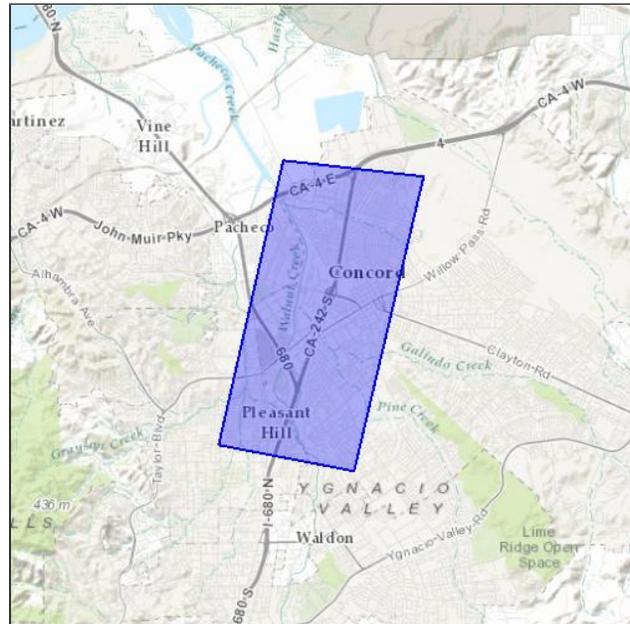
SR 242 Clayton Road Ramps Project

LOCATION

Contra Costa County, California

IPAC LINK

<https://ecos.fws.gov/ipac/project/XD52C-EWG2Z-BKRPC-A7JFG-AD2OZM>



U.S. Fish & Wildlife Service Contact Information

Trust resources in this location are managed by:

Sacramento Fish And Wildlife Office

Federal Building

2800 Cottage Way, Room W-2605

Sacramento, CA 95825-1846

(916) 414-6600

Endangered Species

Proposed, candidate, threatened, and endangered species are managed by the [Endangered Species Program](#) of the U.S. Fish & Wildlife Service.

This USFWS trust resource report is for informational purposes only and should not be used for planning or analyzing project level impacts.

For project evaluations that require USFWS concurrence/review, please return to the IPaC website and request an official species list from the Regulatory Documents section.

[Section 7](#) of the Endangered Species Act **requires** Federal agencies to "request of the Secretary information whether any species which is listed or proposed to be listed may be present in the area of such proposed action" for any project that is conducted, permitted, funded, or licensed by any Federal agency.

A letter from the local office and a species list which fulfills this requirement can only be obtained by requesting an official species list either from the Regulatory Documents section in IPaC or from the local field office directly.

The list of species below are those that may occur or could potentially be affected by activities in this location:

Amphibians

California Red-legged Frog *Rana draytonii* Threatened

CRITICAL HABITAT

There is **final** critical habitat designated for this species.

http://ecos.fws.gov/tess_public/profile/speciesProfile.action?sPCODE=D02D

California Tiger Salamander *Ambystoma californiense* Threatened

CRITICAL HABITAT

There is **final** critical habitat designated for this species.

http://ecos.fws.gov/tess_public/profile/speciesProfile.action?sPCODE=D01T

Birds

California Clapper Rail *Rallus longirostris obsoletus* Endangered

CRITICAL HABITAT

No critical habitat has been designated for this species.

http://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=B04A

California Least Tern *Sterna antillarum browni* Endangered

CRITICAL HABITAT

No critical habitat has been designated for this species.

http://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=B03X

Crustaceans

California Freshwater Shrimp *Syncaris pacifica* Endangered

CRITICAL HABITAT

No critical habitat has been designated for this species.

http://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=K01W

Vernal Pool Fairy Shrimp *Branchinecta lynchi* Threatened

CRITICAL HABITAT

There is final critical habitat designated for this species.

http://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=K03G

Fishes

Delta Smelt *Hypomesus transpacificus* Threatened

CRITICAL HABITAT

There is final critical habitat designated for this species.

http://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=E070

Steelhead *Oncorhynchus (=Salmo) mykiss* Threatened

CRITICAL HABITAT

There is final critical habitat designated for this species.

http://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=E08D

Flowering Plants

Antioch Dunes Evening-primrose *Oenothera deltoides* ssp. *howellii* Endangered

CRITICAL HABITAT

There is **final** critical habitat designated for this species.

http://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=Q1ZN

Contra Costa Goldfields *Lasthenia conjugens* Endangered

CRITICAL HABITAT

There is **final** critical habitat designated for this species.

http://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=Q122

Soft Bird's-beak *Cordylanthus mollis* ssp. *mollis* Endangered

CRITICAL HABITAT

There is **final** critical habitat designated for this species.

http://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=Q0GT

Insects

Callippe Silverspot Butterfly *Speyeria callippe callippe* Endangered

CRITICAL HABITAT

No critical habitat has been designated for this species.

http://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=I019

Delta Green Ground Beetle *Elaphrus viridis* Threatened

CRITICAL HABITAT

There is **final** critical habitat designated for this species.

http://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=I01G

San Bruno Elfin Butterfly *Callophrys mossii bayensis* Endangered

CRITICAL HABITAT

No critical habitat has been designated for this species.

http://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=I00Q

Valley Elderberry Longhorn Beetle *Desmocerus californicus dimorphus* Threatened

CRITICAL HABITAT

There is **final** critical habitat designated for this species.

http://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=I01L

Mammals

Salt Marsh Harvest Mouse *Reithrodontomys raviventris* Endangered

CRITICAL HABITAT

No critical habitat has been designated for this species.

http://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=A03Y

Reptiles

Alameda Whipsnake (=striped Racer) *Masticophis lateralis euryxanthus* Threatened

CRITICAL HABITAT

There is **final** critical habitat designated for this species.

http://ecos.fws.gov/tess_public/profile/speciesProfile.action?sPCODE=C04A

Giant Garter Snake *Thamnophis gigas* Threatened

CRITICAL HABITAT

No critical habitat has been designated for this species.

http://ecos.fws.gov/tess_public/profile/speciesProfile.action?sPCODE=C057

Critical Habitats

There are no critical habitats in this location

Migratory Birds

Birds are protected by the [Migratory Bird Treaty Act](#) and the [Bald and Golden Eagle Protection Act](#).

Any activity that results in the take of migratory birds or eagles is prohibited unless authorized by the U.S. Fish & Wildlife Service.^[1] There are no provisions for allowing the take of migratory birds that are unintentionally killed or injured.

Any person or organization who plans or conducts activities that may result in the take of migratory birds is responsible for complying with the appropriate regulations and implementing appropriate conservation measures.

1. 50 C.F.R. Sec. 10.12 and 16 U.S.C. Sec. 668(a)

Additional information can be found using the following links:

- Birds of Conservation Concern
<http://www.fws.gov/birds/management/managed-species/birds-of-conservation-concern.php>
- Conservation measures for birds
<http://www.fws.gov/birds/management/project-assessment-tools-and-guidance/conservation-measures.php>
- Year-round bird occurrence data
<http://www.birdscanada.org/birdmon/default/datasummaries.jsp>

The following species of migratory birds could potentially be affected by activities in this location:

Allen's Hummingbird <i>Selasphorus sasin</i>	Bird of conservation concern
Season: Breeding http://ecos.fws.gov/tess_public/profile/speciesProfile.action?sPCODE=B0LI	
Bald Eagle <i>Haliaeetus leucocephalus</i>	Bird of conservation concern
Year-round http://ecos.fws.gov/tess_public/profile/speciesProfile.action?sPCODE=B008	
Bell's Sparrow <i>Amphispiza belli</i>	Bird of conservation concern
Year-round http://ecos.fws.gov/tess_public/profile/speciesProfile.action?sPCODE=B0HE	
Black Oystercatcher <i>Haematopus bachmani</i>	Bird of conservation concern
Year-round http://ecos.fws.gov/tess_public/profile/speciesProfile.action?sPCODE=B0KJ	

Black Rail <i>Laterallus jamaicensis</i> Season: Breeding http://ecos.fws.gov/tess_public/profile/speciesProfile.action?scode=B09A	Bird of conservation concern
Burrowing Owl <i>Athene cunicularia</i> Year-round http://ecos.fws.gov/tess_public/profile/speciesProfile.action?scode=B0NC	Bird of conservation concern
Costa's Hummingbird <i>Calypte costae</i> Season: Breeding http://ecos.fws.gov/tess_public/profile/speciesProfile.action?scode=B0JE	Bird of conservation concern
Fox Sparrow <i>Passerella iliaca</i> Season: Wintering	Bird of conservation concern
Lawrence's Goldfinch <i>Carduelis lawrencei</i> Season: Breeding http://ecos.fws.gov/tess_public/profile/speciesProfile.action?scode=B0J8	Bird of conservation concern
Least Bittern <i>Ixobrychus exilis</i> Season: Breeding http://ecos.fws.gov/tess_public/profile/speciesProfile.action?scode=B092	
Lesser Yellowlegs <i>Tringa flavipes</i> Season: Wintering http://ecos.fws.gov/tess_public/profile/speciesProfile.action?scode=B0MD	Bird of conservation concern
Lewis's Woodpecker <i>Melanerpes lewis</i> Season: Wintering http://ecos.fws.gov/tess_public/profile/speciesProfile.action?scode=B0HQ	Bird of conservation concern
Loggerhead Shrike <i>Lanius ludovicianus</i> Year-round http://ecos.fws.gov/tess_public/profile/speciesProfile.action?scode=B0FY	Bird of conservation concern
Long-billed Curlew <i>Numenius americanus</i> Season: Wintering http://ecos.fws.gov/tess_public/profile/speciesProfile.action?scode=B06S	Bird of conservation concern
Marbled Godwit <i>Limosa fedoa</i> Season: Wintering http://ecos.fws.gov/tess_public/profile/speciesProfile.action?scode=B0JL	Bird of conservation concern
Mountain Plover <i>Charadrius montanus</i> Season: Wintering http://ecos.fws.gov/tess_public/profile/speciesProfile.action?scode=B078	Bird of conservation concern
Nuttall's Woodpecker <i>Picoides nuttallii</i> Year-round http://ecos.fws.gov/tess_public/profile/speciesProfile.action?scode=B0HT	Bird of conservation concern

Oak Titmouse <i>Baeolophus inornatus</i> Year-round http://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=B0MJ	Bird of conservation concern
Peregrine Falcon <i>Falco peregrinus</i> Year-round http://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=B0FU	Bird of conservation concern
Rufous-crowned Sparrow <i>Aimophila ruficeps</i> Year-round http://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=B0MX	Bird of conservation concern
Short-billed Dowitcher <i>Limnodromus griseus</i> Season: Wintering http://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=B0JK	Bird of conservation concern
Short-eared Owl <i>Asio flammeus</i> Season: Wintering http://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=B0HD	Bird of conservation concern
Snowy Plover <i>Charadrius alexandrinus</i> Season: Breeding	Bird of conservation concern
Swainson's Hawk <i>Buteo swainsoni</i> Season: Breeding http://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=B070	Bird of conservation concern
Tricolored Blackbird <i>Agelaius tricolor</i> Year-round http://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=B06P	Bird of conservation concern
Western Grebe <i>aechmophorus occidentalis</i> Year-round http://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=B0EA	Bird of conservation concern
Yellow Rail <i>Coturnicops noveboracensis</i> Season: Wintering http://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=B0JG	Bird of conservation concern
Yellow-billed Magpie <i>Pica nuttalli</i> Year-round http://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=B0N8	Bird of conservation concern

Wildlife refuges and fish hatcheries

Refuge and fish hatchery data is unavailable at this time.

Wetlands in the National Wetlands Inventory

Impacts to [NWI wetlands](#) and other aquatic habitats may be subject to regulation under Section 404 of the Clean Water Act, or other State/Federal statutes.

For more information please contact the Regulatory Program of the local [U.S. Army Corps of Engineers District](#).

DATA LIMITATIONS

The Service's objective of mapping wetlands and deepwater habitats is to produce reconnaissance level information on the location, type and size of these resources. The maps are prepared from the analysis of high altitude imagery. Wetlands are identified based on vegetation, visible hydrology and geography. A margin of error is inherent in the use of imagery; thus, detailed on-the-ground inspection of any particular site may result in revision of the wetland boundaries or classification established through image analysis.

The accuracy of image interpretation depends on the quality of the imagery, the experience of the image analysts, the amount and quality of the collateral data and the amount of ground truth verification work conducted. Metadata should be consulted to determine the date of the source imagery used and any mapping problems.

Wetlands or other mapped features may have changed since the date of the imagery or field work. There may be occasional differences in polygon boundaries or classifications between the information depicted on the map and the actual conditions on site.

DATA EXCLUSIONS

Certain wetland habitats are excluded from the National mapping program because of the limitations of aerial imagery as the primary data source used to detect wetlands. These habitats include seagrasses or submerged aquatic vegetation that are found in the intertidal and subtidal zones of estuaries and nearshore coastal waters. Some deepwater reef communities (coral or tubercid worm reefs) have also been excluded from the inventory. These habitats, because of their depth, go undetected by aerial imagery.

DATA PRECAUTIONS

Federal, state, and local regulatory agencies with jurisdiction over wetlands may define and describe wetlands in a different manner than that used in this inventory. There is no attempt, in either the design or products of this inventory, to define the limits of proprietary jurisdiction of any Federal, state, or local government or to establish the geographical scope of the regulatory programs of government agencies. Persons intending to engage in activities involving modifications within or adjacent to wetland areas should seek the advice of appropriate federal, state, or local agencies concerning specified agency regulatory programs and proprietary jurisdictions that may affect such activities.

This location overlaps all or part of the following wetlands:

Estuarine And Marine Deepwater

[E1UBL](#)

Estuarine And Marine Wetland

[E2EM1N](#)

[E2SBN](#)

Freshwater Emergent Wetland

[PEM1C](#)

[PEM1Cx](#)

Freshwater Forested/shrub Wetland

[PFO1Ax](#)

[PFO1Ch](#)

[PFO1Cx](#)

Freshwater Pond

[PUBHh](#)

[PUBHx](#)

Riverine

[R3UBH](#)

[R3UBHx](#)

[R4SBA](#)

[R4SBAx](#)

[R4SBC](#)

A full description for each wetland code can be found at the National Wetlands Inventory website: <http://107.20.228.18/decoders/wetlands.aspx>

NMFS Data accessed on 7/14/16

Quad Name **Walnut Creek**

Quad Number **37122-H1**

Note: "X" denotes species within study area

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 -

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) -

Essential Fish Habitat

Coho EFH -

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 Monica DeAngelis

monica.deangelis@noaa.gov

562-980-3232

MMPA Cetaceans -

MMPA Pinnipeds -

Potential Occurrence of Special-Status Plant Species in the BSA

Scientific Name	Common Name	Status	Typical Habitat	Occurrence Potential	Effect finding for Federal and State Listed Species
<i>Amsinckia lunaris</i>	bent-flowered fiddleneck	CNPS 1B.2	Found on gravelly slopes, grasslands, coastal bluff scrub, openings in woodland, often on serpentinite; from 3-500 m (10-1640 ft) of elevation.	No potential to occur. No serpentinite or gravelly substrate present.	No effect – no habitat available within project limits.
<i>Astragalus tener</i> var. <i>tener</i>	alkali milk-vetch	CNPS 1B.2	Occurs on alkaline substrates in playas, valley and foothill grassland on adobe clay, and vernal pools between 1-60 m (3-195 ft) elevation; blooms March – June.	No potential to occur. No vernal pools or appropriate wetland habitat present onsite; County Quarry Products Property to the north may have potential, but highly disturbed habitat; slightly to moderately alkaline soils exist between I-680 and SR-242.	No effect – no habitat available within project limits.
<i>Atriplex cordulata</i> var. <i>cordulata</i>	heartscale	CNPS 1B.2	Occurs in chenopod scrub, meadows and seeps, valley and foothill grassland on sandy, saline or alkaline substrates between 0 - 560 m (0-1835 ft) elevation; blooms April – October.	No potential to occur. No alkaline or sandy substrates onsite, only nonsaline to slightly saline soils between I-680 and Solano Way; on disturbed annual grassland present within project area.	No effect – no habitat available within project limits.
<i>Atriplex depressa</i>	brittlescale	CNPS 1B.2	Occurs in chenopod scrub, meadows and seeps, playas, valley and foothill grassland, and vernal pools on alkaline clay substrates between 1-320 m (3-1050 ft) of elevation; blooms April – October.	Low potential to occur. Clay soils occur between I-680 and Solano Way; slightly to moderately alkaline soils exist between I-680 and SR-242; only disturbed annual grassland present within project area.	No effect – no habitat available within project limits.

Scientific Name	Common Name	Status	Typical Habitat	Occurrence Potential	Effect finding for Federal and State Listed Species
<i>Atriplex persistens</i>	vernal pool smallscale	CNPS 1B.2	Alkaline vernal pool from 10 - 115 m (30-375 ft) elevation; blooms June – October.	No potential to occur. No vernal pools or appropriate wetland habitat present onsite; County Quarry Products Property to the north may have potential, but highly disturbed habitat; slightly to moderately alkaline soils exist between I-680 and SR-242.	No effect – no habitat available within project limits.
<i>Blepharizonia plumosa</i>	big tarplant	CNPS 1B.1	Occurs on clay substrates in valley and foothill grassland between 30-505 m (100-1650 ft) of elevation; blooms July – October.	Low potential to occur. Clay soils occur between I-680 and Solano Way; only disturbed annual grassland present within project area.	No effect – no habitat available within project limits.
<i>California macrophylla</i>	round-leaved filaree	CNPS 1B.1	Occurs in cismontane woodland, valley and foothill grassland on clay soils between 15-1,200 m (50-3930 ft) of elevation; blooms March – May.	Low potential to occur. Clay soils occur between I-680 and Solano Way; only disturbed planted mixed oak woodland and annual grassland present within project area.	No effect – no habitat available within project limits.
<i>Calochortus pulchellus</i>	Mt. Diablo fairy-lantern	CNPS 1B.2	Found on north-facing wooded slopes, rarely within chaparral, riparian woodland, and valley and foothill grassland; between 30-840 m (100-2755 ft) of elevation; blooms April – June.	No potential to occur. No remnant, disturbed planted mixed oak woodlands on north-facing slopes present.	No effect – no habitat available within project limits.
<i>Centromadia parryi</i> ssp. <i>congdonii</i>	Congdon's tarplant	CNPS 1B.1	Occurs in alkaline valley and foothill grassland between 1-230 m (3-750 ft) of elevation; blooms May - November; nearest CNDDB occurrence in developed Pacheco is extirpated; occurrence 1.5 mi north on McNabney marsh.	Low potential to occur. Slightly to moderately alkaline soils exist between I-680 and SR-242; only disturbed annual grassland present within project area.	No effect – no habitat available within project limits.

Scientific Name	Common Name	Status	Typical Habitat	Occurrence Potential	Effect finding for Federal and State Listed Species
<i>Centromadia parryi</i> ssp. <i>parryi</i>	pappose tarplant	CNPS 1B.2	Coastal prairie, coastal salt marsh and swamp, alkaline springs, chaparral, seeps, meadow and vernal pool grassland, often on alkaline substrate; ranges from 0 - 420 m (0-1375 ft) in elevation; blooms May – November.	No potential to occur. No vernal pools or appropriate wetland habitat present onsite; County Quarry Products Property to the north may have potential, but highly disturbed habitat; no other preferred habitat types exist onsite; slightly to moderately alkaline soils exist between I-680 and SR-242.	No effect – no habitat available within project limits.
<i>Chloropyron molle</i> ssp. <i>hispidum</i>	hispid bird's-beak	CNPS 1B.1	Alkali playa, meadow, seep, playa within valley and foothill grasslands from 1 - 155 m (3-505 ft) elevation; blooms June – September.	No potential to occur. No vernal pools or appropriate wetland habitat present onsite; County Quarry Products Property to the north may have potential, but highly disturbed habitat; slightly to moderately alkaline soils exist between I-680 and SR-242.	No effect – no habitat available within project limits.
<i>Cordylanthus mollis</i> ssp. <i>mollis</i>	Soft Bird's-beak	FE 1B.2	Soft bird's-beak is found predominantly in the upper reaches of salt grass / pickleweed marshes at or near the limits of tidal action. It is associated with pickleweed or Virginia glasswort (<i>Salicornia virginica</i>), saltgrass (<i>Distichlis spicata</i>), fleshy or marsh jaumea (<i>Jaumea carnosa</i>), alkali seaheath (<i>Frankenia salina</i>) and seaside arrowgrass (<i>Triglochin maritima</i>).	No potential to occur. Tidal limits do not reach the project site. No habitat present.	No effect - no habitat available within project limits.
<i>Cicuta maculata</i> var. <i>bolanderi</i>	Bolander's water-hemlock	CNPS 2B.1	Occurs in coastal, brackish or fresh marshes and swamps between 0-200 m (0-655 ft) in elevation; blooms July – September.	No potential to occur. No habitat present.	No effect – no habitat available within project limits.

Scientific Name	Common Name	Status	Typical Habitat	Occurrence Potential	Effect finding for Federal and State Listed Species
<i>Cirsium hydrophilum</i> var. <i>hydrophilum</i>	Suisun thistle	FE/ CNPS 1B.1	Tidal salt marsh and coastal wetlands from 0-1 m (0-3 ft) in elevation; blooms June - September; Rediscovered in 1989 by N. Havlik on Grizzly Isl. in the Suisun Marsh; now known from two occurrences.	No potential to occur. No habitat present.	No effect – no habitat available within project limits.
<i>Dirca occidentalis</i>	western leatherwood	CNPS 1B.2	Occurs in broad-leaved upland forest, closed-cone coniferous forest, chaparral, cismontane woodland, North Coast coniferous forest, riparian forest, and riparian woodland, often on brushy slopes and mesic sites between 50-400 m (165-1310 ft) elevation; blooms January – April.	Low potential to occur. Only remnant disturbed planted mixed oak woodland and coyote brush are present along freeway margins.	No effect – no habitat available within project limits.
<i>Downingia pusilla</i>	dwarf downingia	CNPS 2B.2	Occurs in vernal pools and mesic sites in valley and foothill grassland between 1-445 m (3-1460 ft) of elevation; blooms March – May.	No potential to occur. No vernal pools or appropriate wetland habitat present onsite; County Quarry Products Property to the north may have potential, but highly disturbed habitat.	No effect – no habitat available within project limits.
<i>Juglans hindsii</i>	Northern California black walnut	CNPS 1B.1	Occurs in riparian forest and woodlands in areas with deep alluvial soils associated with creeks or streams. Found between 0-440 m (0-1445 ft) in elevation; blooms April – May.	No potential to occur. No riparian forests in project area, creeks are cleared of woody vegetation.	No effect – no habitat available within project limits.
<i>Lasthenia conjugens</i>	Contra Costa goldfields	FE/ CNPS 1B.1	Occurs in vernal pools, alkaline playas, mesic valley and foothill grassland, between 0-470 m (0-1540 ft) of elevation; blooms March – June.	No potential to occur. Alkaline substrates and preferred wetland habitat absent; only highly disturbed and managed grasslands along freeway within project area.	No effect – no habitat available within project limits.
<i>Lathyrus jepsonii</i> var. <i>jepsonii</i>	Delta tule pea	CNPS 1B.2	Coastal and estuarine freshwater to brackish marsh and swamps between 0-4 m (0-15 ft) of elevation; blooms May – September.	No potential to occur. No habitat present.	No effect – no habitat available within project limits.

Scientific Name	Common Name	Status	Typical Habitat	Occurrence Potential	Effect finding for Federal and State Listed Species
<i>Legenere limosa</i>	legenere	CNPS 1B.1	Vernal pool, ponds and wet areas within valley grassland between 1 - 880 m (3-2885 ft) of elevation; blooms April – June.	No potential to occur. No vernal pools or appropriate wetland habitat present onsite; County Quarry Products Property to the north may have potential, but highly disturbed habitat.	No effect – no habitat available within project limits.
<i>Lilaeopsis masonii</i>	Mason's lilaeopsis	SR/ CNPS 1B.1	Intertidal marshes and streams, including freshwater or brackish marsh, swamp and riparian scrub stream banks between 0 - 10 m (0-30 ft) of elevation; blooms April - November; Locally common in Suisun Bay.	No potential to occur. No riparian forests in project area, creeks are cleared of woody vegetation.	No effect – no habitat available within project limits.
<i>Limosella australis</i>	Delta mudwort	CNPS 2B.1	Usually found on mud banks or on muddy or sandy intertidal flats, within brackish or freshwater marsh and swamp between 0-3 m (0-10 ft) of elevation; blooms May – August.	No potential to occur. No habitat present.	No effect – no habitat available within project limits.
<i>Madia radiata</i>	showy golden madia	CNPS 1B.1	Occurs on grassy or open slopes, generally on clayey soils or shale between 25 - 1215 m (80-3985 ft) of elevation; blooms March – May.	Low potential to occur. Only highly disturbed and managed grasslands along freeway within project area; clay soils occur between I-680 and Solano Way.	No effect – no habitat available within project limits.
<i>Navarretia leucocephala ssp. bakeri</i>	Baker's navarretia	CNPS 1B.1	Occurs on adobe or alkaline soils in vernal pools or mesic areas within cismontane woodland, meadows and seeps, valley and foothill grassland, and lower montane coniferous forest, between 5-1740 m (15-5705 ft) of elevation; blooms April – July.	Alkaline substrates absent; clay soils occur between I-680 and Solano Way; No vernal pools or appropriate wetland habitat present onsite; County Quarry Products Property to the north may have potential, but highly disturbed habitat.	No effect – no habitat available within project limits.
<i>Oenothera deltoids ssp. Howellii</i>	Antioch Dunes Evening-primrose	FE 1B.1	The only naturally-occurring populations of Antioch Dunes evening-primrose are in the Antioch Dunes National Wildlife Refuge. Antioch Dunes evening-primrose	No potential to occur. The project site is not within the Antioch Dunes National Wildlife Refuge. No new sand in project area. No suitable habitat present.	No effect - no habitat available within project limits.

Scientific Name	Common Name	Status	Typical Habitat	Occurrence Potential	Effect finding for Federal and State Listed Species
			grows in mostly pure sand, but unlike other species, it will only re-establish in areas that contain new sand.		
<i>Plagiobothrys hystriculus</i>	bearded popcornflower	CNPS 1B.1	Vernal pools, vernal swales and wet grassland margins within valley and foothill grassland between 0 - 274 m (0-900 ft) of elevation; blooms April – May.	No potential to occur. No vernal pools or appropriate wetland habitat present onsite; County Quarry Products Property to the north may have potential, but highly disturbed habitat.	No effect – no habitat available within project limits.
<i>Polygonum marinense</i>	Marin knotweed	CNPS 3.1	Occurs in coastal salt or brackish marshes and swamps between 0 - 10 m (0-30 ft) of elevation; blooms April - October; taxonomic issues with the definition of this species.	No potential to occur. No habitat present.	No effect – no habitat available within project limits.
<i>Sanicula maritima</i>	adobe sanicle	SR/ CNPS 1B.1	Found on clay and serpentinite within chaparral, coastal prairie, meadows and seeps, and valley and foothill grassland between 30 - 240 m (100-785 ft) of elevation; blooms February - May; apparently extirpated from the San Francisco Bay Area.	No potential to occur. No serpentine soils present; clay soils occur between I-680 and Solano Way; only highly disturbed and managed grasslands along freeway within project area.	No effect – no habitat available within project limits.
<i>Symphotrichum lentum</i>	Suisun Marsh aster	CNPS 1B.2	Brackish and freshwater marsh and swamp between 0 - 3 m (0-10 ft) of elevation; blooms May – November.	No potential to occur.No habitat present.	No effect – no habitat available within project limits.

Scientific Name	Common Name	Status	Typical Habitat	Occurrence Potential	Effect finding for Federal and State Listed Species
<i>Trifolium amoenum</i>	showy rancheria clover	FE/ CNPS 1B.1	Occurs in open valley and foothill grasslands, and coastal bluff scrub, sometimes occurs on serpentine soils between 5 - 415 m (15-1360 ft) of elevation; blooms April - June; it is presumed extirpated from all quadrangle occurrences surrounding the project area.	No potential to occur. No serpentine soils present; only highly disturbed and managed grasslands along freeway within project area; only highly disturbed and managed grasslands along freeway within project area.	No effect – no habitat available within project limits.
<i>Trifolium hydrophilum</i>	saline clover	CNPS 1B.2	Salt marsh and swamp, vernal pool or other wetlands within valley and foothill grassland on alkaline soils between 0 - 300 m (0-985 ft) of elevation; blooms April – June.	No potential to occur. Slightly to moderately alkaline soils exist between I-680 and SR-242; only highly disturbed and managed grasslands along freeway within project area.	No effect – no habitat available within project limits.
<i>Tropidocarpum capparideum</i>	caper-fruited tropidocarpum	CNPS 1B.1	Occurs in valley and foothill grassland, often alkaline hills, between 1-455 m (3-1490 ft) of elevation; blooms March - April; rediscovered in 2000 on Ft. Hunter Liggett, considered extirpated in the East Bay.	Low potential to occur. No alkaline soils present; only highly disturbed and managed grasslands along freeway within project area.	No effect – no habitat available within project limits.

¹ Status Definitions:

FE= Federally Endangered

SE= State Endangered

FT= Federally Threatened

ST= State Threatened

SR= State Rare

California Native Plant Society (CNPS):

1A= Presumed Extinct in CA

1B= Rare, Threatened or Endangered in CA and Elsewhere

2= Rare, Threatened or Endangered in CA, but More Common Elsewhere

3= Plants About Which More Information is Needed

0.1= Seriously Threatened in CA

0.2= Fairly Threatened in CA

0.3= Not Very Threatened in CA

Potential Occurrence of Special-Status Animal Species in the BSA

Scientific Name	Common Name	Status	Typical Habitat	Occurrence Potential	Effect finding for Federally and State Listed Species
Amphibians					
<i>Ambystoma californiense</i>	California tiger salamander- central California DPS	FT/ST/SSC	Quiet water of ponds, reservoirs, lakes, vernal pools, streams, and stock ponds within annual grasslands, oak savannah, oak woodland and open chaparral.	No potential to occur. No habitat present.	No effect – no habitat available within project limits.
<i>Rana boylei</i>	foothill yellow-legged frog	SSC	Closely associated with permanent water courses including streams or rivers in woodland, chaparral, and forest. Often found in riffles with rocks and sunny banks.	No potential to occur. No habitat present.	No effect – no habitat available within project limits.
<i>Rana draytonii</i>	California red-legged frog	FT/SSC	Chiefly lakes, ponds, and streams in coastal forest, inland woodlands, and valley grasslands where cattails, bulrush, or other plants provide dense cover. Aquatic sites need not be permanent.	No potential to occur. No habitat present.	No effect – no habitat available within project limits.
Birds					
<i>Agelaius tricolor</i>	tricolored blackbird	SSC	Found nesting in emergent wetland plant cover (e.g., blackberry shrubs, cattails). Preferred foraging habitat includes irrigated pastures, lightly grazed rangelands, dry seasonal pools, mowed alfalfa fields, feedlots, and dairies.	No potential to occur. No habitat present.	No effect – no habitat available within project limits.
<i>Aquila chrysaetos</i>	golden eagle	SFP/WL/BGEP A	Inhabits mountainous or hilly terrain, hunting over open country. Also found in valleys and western plains, especially in migration and winter. Nests on isolated cliffs or in trees.	No potential to occur. No habitat present.	No effect – no habitat available within project limits.
<i>Asio flammeus</i>	short-eared owl	SSC	Fresh and saltwater marshes, lowland meadows, and irrigated alfalfa fields that contain tule patches or tall grasses. Nests on dry ground concealed by tall vegetation.	No potential to occur. No habitat present.	No effect – no habitat available within project limits.

Scientific Name	Common Name	Status	Typical Habitat	Occurrence Potential	Effect finding for Federally and State Listed Species
<i>Athene cunicularia</i>	burrowing owl	SSC	Often associated with California ground squirrel burrow complexes in open, treeless areas within grassland, steppe, and desert biomes; agricultural fields, golf courses, cemeteries, road allowances, airports, vacant urban lots, and fairgrounds are regularly used.	No potential to occur. No habitat present.	No effect – no habitat available within project limits.
<i>Buteo swainsoni</i>	Swainson's hawk	ST	Forages in open stands of grass-dominated vegetation, sparse shrublands, and small, open woodlands, agricultural areas (annual crops). Nests in scattered trees within grassland, shrubland, or agricultural landscapes (e.g., along stream courses or in open woodlands).	No potential to occur. No habitat present.	No effect – no habitat available within project limits.
<i>Charadrius alexandrinus nivosus</i>	western snowy plover	FT/SSC/BCC	Found on coastal beaches. Breeding also occurs on sand spits, dune-backed beaches, sparsely-vegetated dunes and salt pans. Occasional anthropogenic sites are used: disposal sites, salt ponds and river bars.	No potential to occur. No habitat present.	No effect – no habitat available within project limits.
<i>Circus cyaneus</i>	northern harrier	SSC	Found in upland grassland and croplands, as well as wetland habitats: marshy meadows; wet, lightly grazed pastures; old fields; freshwater and brackish marshes; Typically nests on the ground among dense cover.	No potential to occur. No habitat present.	No effect – no habitat available within project limits.
<i>Falco peregrinus anatum</i>	American peregrine falcon	FP	Forages in open areas in a wide variety of habitat types throughout the world. Wintering populations utilize wetland and urban areas. Generally nests on cliffs near water sources, but increasingly found nesting in unconventional and urban influenced locations.	No potential to occur. No habitat present.	No effect – no habitat available within project limits.
<i>Geothlypis sinuosa trichas</i>	saltmarsh common yellowthroat	SSC	Found in herbaceous salt marshes and wetlands. Nests over water in thick vegetation, shrubs or small trees in salt marshes.	No potential to occur. No habitat present.	No effect – no habitat available within project limits.

Scientific Name	Common Name	Status	Typical Habitat	Occurrence Potential	Effect finding for Federally and State Listed Species
<i>Haliaeetus leucocephalus</i>	bald eagle	SE/FP	Often on seacoasts or near rivers and lakes where it forages for fish and carrion. Nests in tall trees or occasionally on cliffs.	No potential to occur. No habitat present.	No effect – no habitat available within project limits.
<i>Laterallus jamaicensis coturniculus</i>	California black rail	ST/FP	Saline, brackish, and fresh emergent wetlands in the San Francisco Bay area. Tidal sloughs with marsh vegetation for nesting are preferred.	No potential to occur. No habitat present.	No effect – no habitat available within project limits.
<i>Melospiza melodia maxillaris</i>	Suisun song sparrow	SSC	Nests on the ground or in shrubs or herbaceous vegetation within tidal wetlands, estuaries and brackish marshes.	No potential to occur. No habitat present.	No effect – no habitat available within project limits.
<i>Melospiza melodia pusillula</i>	Alameda song sparrow	SSC	Restricted to the tidal wetlands within the fringes of south San Francisco Bay with emergent vegetation above the high tide level for nesting; prefers habitat with <i>Baccharis pilularis</i> or <i>Grindelia</i> for nesting along upland edge.	No potential to occur. No habitat present.	No effect – no habitat available within project limits.
<i>Melospiza melodia samuelis</i>	San Pablo song sparrow	SSC	Inhabits salt marshes along the San Francisco and San Pablo Bays. Resident of tidal sloughs with <i>Salicornia</i> marsh and nests in <i>Grindelia</i> bordering slough channels.	No potential to occur. No habitat present.	No effect – no habitat available within project limits.
<i>Pelecanus occidentalis californicus</i>	California brown pelican	FP	Occurs in coastal marine and estuarine habitats. Generally breeds in colonies, on off-shore islands.	No potential to occur. No habitat present.	No effect – no habitat available within project limits.
<i>Rallus longirostris obsoletus</i>	California clapper rail	FE/SE/FP	Coastal wetlands and brackish areas around San Francisco, Monterey, and Morro bays.	No potential to occur. No habitat present.	No effect – no habitat available within project limits.
<i>Sternula antillarum browni</i>	California least tern	FE/SE/FP	Feeds in shallow, estuarine waters; breeding colonies are located in abandoned salt ponds and along estuarine shores.	No potential to occur. No habitat present.	No effect – no habitat available within project limits.
Fish					
<i>Acipenser medirostris</i>	green sturgeon	FT/SSC	Streams, rivers, estuarine, and marine waters. Rivers and their tributaries from Mexico to Alaska, though not common in any Pacific tributary.	No potential to occur. No habitat present.	No effect – no habitat available within project limits.

Scientific Name	Common Name	Status	Typical Habitat	Occurrence Potential	Effect finding for Federally and State Listed Species
<i>Archoplites interruptus</i>	Sacramento perch	SSC	Historically found in sloughs, slow-moving rivers, and lakes of the Central Valley of California. Can tolerate a large range of water conditions, but prefers warm temperatures. Aquatic vegetation is essential for young.	No potential to occur. No habitat present.	No effect – no habitat available within project limits.
<i>Eucyclogobius newberryi</i>	tidewater goby	FE/SSC	Occupies freshwater lagoons, estuaries, marshes, and lower reaches of freshwater tributaries. Spawning occurs in sandy substrates. Larvae occur in midwater vegetation.	No potential to occur. No habitat present.	No effect – no habitat available within project limits.
<i>Hypomesus transpacificus</i>	delta smelt	FT/SE	Found only from the Suisun Bay upstream through the Delta in Contra Costa, Sacramento, San Joaquin, Solano and Yolo counties. Typically found in estuarine waters along the freshwater edge of the mixing zone (saltwater-freshwater interface), and upstream into river channels and tidally-influenced backwater sloughs. Most spawning happens in tidally-influenced backwater sloughs and channel edgewater.	No potential to occur. No habitat present.	No effect – no habitat available within project limits.
<i>Oncorhynchus kisutch</i>	coho salmon - central CA coast	FE/SE	Migrates from estuarine and marine waters of the Pacific Ocean into freshwater rivers and tributaries for breeding and rearing. Spawning occurs in small streams with stable gravel substrates.	No potential to occur. No habitat present.	No effect – no habitat available within project limits.
<i>Oncorhynchus mykiss</i>	Central Valley steelhead	FT	Typically associated with cool freshwater streams and rivers, require sand and gravel for spawning. Rivers of the Central Valley and their tributaries, excluding streams tributary to San Francisco and San Pablo Bays.	No potential to occur. No habitat present.	No effect – no habitat available within project limits.

Scientific Name	Common Name	Status	Typical Habitat	Occurrence Potential	Effect finding for Federally and State Listed Species
<i>Oncorhynchus mykiss</i>	Central California Coastal steelhead	FT/SSC	Typically associated with cool freshwater streams and rivers, require sand and gravel for spawning. Population occurs in streams tributary to San Francisco and San Pablo Bays, including Suisun Bay.	No potential to occur. No habitat present.	No effect – no habitat available within project limits.
<i>Oncorhynchus tshawytscha</i>	Central Valley spring-run chinook salmon	FT/ST	Large, deep, cool pools, usually bedrock bottoms of moderate velocity. Coarse substrate (gravel and small cobble) important. Shallow water with slow streams and estuaries for juveniles. Riffles, runs, tail ends of pools, some dense cover or emergent vegetation, swift moving water.	No potential to occur. No habitat present.	No effect – no habitat available within project limits.
<i>Oncorhynchus tshawytscha</i>	winter-run chinook salmon, Sacramento River	FE/SE	Spawning and rearing in clear, spring-fed rivers of the upper Sacramento basin, especially McCloud River, where temperatures are typically 10-15 °C.	No potential to occur. No habitat present.	No effect – no habitat available within project limits.
<i>Pogonichthys macrolepidotus</i>	Sacramento splittail	SSC	Limited to fresh and brackish bays and tidal rivers, preferring slow-moving waters, pools and dead-end sloughs of the Delta region.	No potential to occur. No habitat present.	No effect – no habitat available within project limits.
<i>Spirinchus thaleichthys</i>	longfin smelt	FC/ST/SSC	Fresh to saline open water bay, estuary, and nearshore coastal environments from the San Francisco Bay to Alaska.	No potential to occur. No habitat present.	No effect – no habitat available within project limits.
Mammals					
<i>Antrozous pallidus</i>	pallid bat	SSC	Deserts, grasslands, scrublands, woodlands and open forests. Most common in open, dry habitats with rocky areas for roosting. Roosts in caves, crevices, mines and buildings.	No potential to occur. No habitat present.	No effect – no habitat available within project limits.
<i>Nyctinomops macrotis</i>	big free-tailed bat	SSC	Feeds over water and upon large flying insects (moths). Roosts in caves, rock crevices, and buildings, but is not likely to breed in California. Most records of occurrence are from southern California, possible vagrant in northern California.	No potential to occur. No habitat present.	No effect – no habitat available within project limits.

Scientific Name	Common Name	Status	Typical Habitat	Occurrence Potential	Effect finding for Federally and State Listed Species
<i>Reithrodontomys raviventris</i>	salt-marsh harvest mouse	FE/SE/FP	Only in saline emergent wetlands of San Francisco Bay and its tributaries.	No potential to occur. No habitat present.	No effect – no habitat available within project limits.
<i>Scapanus latimanus parvus</i>	Alameda Island mole	SSC	Limited to salt marsh habitat on Alameda Island near Oakland. It may be extirpated due to extensive development of preferred habitat.	No potential to occur. No habitat present.	No effect – no habitat available within project limits.
<i>Sorex ornatus sinuosus</i>	Suisun shrew	SSC	Found in saline and brackish tidal marshes, and swamps along the northern extent of San Pablo and Suisun Bays with short dense vegetation. Nesting occurs in areas above tidal flooding near upland and wetland transition.	No potential to occur. No habitat present.	No effect – no habitat available within project limits.
<i>Taxidea taxus</i>	American badger	SSC	Herbaceous, shrub, and open stages of most habitats with dry, friable soils.	No potential to occur. No habitat present.	No effect – no habitat available within project limits.
<i>Vulpes macrotis mutica</i>	San Joaquin kit fox	FE/ST	Open, level, sandy ground preferred. Often associated with annual grasslands and small mammal burrow complexes.	No potential to occur. No habitat present.	No effect – no habitat available within project limits.
<i>Emys marmorata</i>	western pond turtle	SSC	Aquatic turtle of ponds, lakes, marshes, rivers, streams, and irrigation ditches that typically have rocky or muddy bottom, with aquatic vegetation. Nests in uplands associated with wetland habitat.	No potential to occur. No habitat present.	No effect – no habitat available within project limits.
<i>Masticophis lateralis euryxanthus</i>	Alameda whipsnake	FT/ST	Scrublands broken by scattered grassy patches, rocky hillsides, gullies, oak woodlands and associated canyons and stream courses. Typically associated with abundant lizard populations.	No potential to occur. No habitat present.	No effect – no habitat available within project limits.
<i>Phrynosoma blainvillii</i>	coast horned lizard	SSC	Open country, especially sandy areas, washes, flood plains and wind-blown deposits in a wide variety of habitats. Common in lowlands along sandy washes where scattered low shrubs provide cover. Requires friable soils.	No potential to occur. No habitat present.	No effect – no habitat available within project limits.

Scientific Name	Common Name	Status	Typical Habitat	Occurrence Potential	Effect finding for Federally and State Listed Species
<i>Thamnophis gigas</i>	giant garter snake	FT/ST	Marshes, sloughs, mud-bottom canals of rice farming areas, but occasionally slow streams. Bulrush and cattails typically present. Extremely aquatic.	No potential to occur. No habitat present.	No effect – no habitat available within project limits.
Invertebrates					
<i>Apodemia mormo langei</i>	Lange's metalmark butterfly	FE	Dependent on host plant species, <i>Eriogonum nudum</i> var. <i>auriculatum</i> , for reproduction and early development.	No potential to occur. No habitat present.	No effect – no habitat available within project limits.
<i>Branchinecta conservatio</i>	Conservancy fairy shrimp	FE	Rather large, cool-water vernal pools with moderately turbid water; the pools generally last until June.	No potential to occur. No habitat present.	No effect – no habitat available within project limits.
<i>Branchinecta longiantenna</i>	longhorn fairy shrimp	FE	Found in vernal pool grasslands, isolated wetlands that hold water for a minimum of 23 days in all but driest years with detritus (food) and structural complexity.	No potential to occur. No habitat present.	No effect – no habitat available within project limits.
<i>Branchinecta lynchi</i>	vernal pool fairy shrimp	FT	Vernal pool habitats from small, clear, sandstone rock pools to large, turbid, alkaline, grassland valley floor pools. Tends to occur in smaller pools, most frequently pools measuring less than 0.05 acre often associated with mud bottomed swales, or basalt flow depression pools in unplowed grasslands.	No potential to occur. No habitat present.	No effect – no habitat available within project limits.
<i>Callophrys bayensis</i> <i>mossii</i>	San Bruno elfin butterfly	FE	Oviposition occurs on host plant <i>Sedum spathulifolium</i> ; adults occupy rocky outcrops and cliffs in coastal scrub on steep, north-facing slopes.	No potential to occur. No habitat present.	No effect – no habitat available within project limits.
<i>Desmocerus californicus dimorphus</i>	valley elderberry longhorn beetle	FT	Nearly always found on or close to its host plant, <i>Sambucus nigra</i> ssp. <i>caerulea</i> . Inhabited shrubs typically have stems that are 1.0 inch or greater in diameter at ground level. Distribution is patchy throughout the remaining riparian forests of the Central Valley from Redding to Bakersfield.	No potential to occur. No habitat present.	No effect – no habitat available within project limits.

Scientific Name	Common Name	Status	Typical Habitat	Occurrence Potential	Effect finding for Federally and State Listed Species
<i>Elaphrus viridis</i>	delta green ground beetle	FT	More open habitats in the grassland-playa pool matrix, such as edges of pools, trails, roads and ditches. Adults may also occur in the surrounding grasslands.	No potential to occur. No habitat present.	No effect – no habitat available within project limits.
<i>Euphydryas editha bayensis</i>	Bay checkerspot butterfly	FT	Serpentine or similar open grassland slopes of Santa Clara and San Mateo Counties; host plant species include <i>Plantago erecta</i> , <i>Castilleja densiflora</i> , and <i>Castilleja exserta</i> ; soil and rock holes and cracks for larval summer diapause shelter.	No potential to occur. No habitat present.	No effect – no habitat available within project limits.
<i>Lepidurus packardi</i>	vernal pool tadpole shrimp	FE	Inhabits vernal pools containing clear to highly turbid water, ranging in size from 50 square feet to the 89-acre Olcott Lake at Jepson Prairie.	No potential to occur. No habitat present.	No effect – no habitat available within project limits.

Scientific Name	Common Name	Status	Typical Habitat	Occurrence Potential	Effect finding for Federally and State Listed Species
<i>Speyeria callippe</i>	callippe silverspot butterfly	FE	Inhabits open grassland habitats of the San Francisco Bay region. Adults often observed on hilltops and ridges. Eggs are laid on the larval plant food, <i>Viola pedunculata</i> , which blooms early January - April. Populations on San Bruno and Cordelia Hills (Solano county, hills between Vallejo and Cordelia) are only two extant populations USFWS has verified.	No potential to occur. No habitat present.	No effect – no habitat available within project limits.
<i>Syncaris pacifica</i>	California freshwater shrimp	FE	Occurs in shallow riparian pools out of main stream flow areas, with a preference for streams at low elevations and with low gradients. Microhabitat use varies depending on season; will use leafy branches in contact with water in the summer and exposed roots of undercut banks in the winter. This species is endemic to Marin, Napa, and Sonoma Counties.	No potential to occur. No habitat present.	No effect – no habitat available within project limits.

¹ Status Definitions:

FE= Federally Endangered FT=Federally Threatened BCC= Federal Bird of Conservation Concern
 BGEPA= Federal Bald and Golden Eagle Protection Act
 SE= State Endangered ST=State Threatened SSC=State Species of Special Concern SFP=State Fully Protected
 WL=State Watch List

Source: Condor Country Consulting Inc. 2014; CNDDB, 2014