

APPENDIX C SPECIAL STATUS FISH AND WILDLIFE SPECIES KNOWN TO OCCUR OR POTENTIALLY OCCURRING IN THE PROJECT VICINITY¹

SPECIES NAME COMMON NAME	LISTING STATUS*	HABITAT REQUIREMENTS & ADDITIONAL NOTES	HABITAT SUITABILITY & LOCAL DISTRIBUTION	POTENTIAL FOR OCCURRENCE
FEDERAL/STATE LISTED, PROPOSED, CANDIDATE AND/OR FULLY PROTECTED SPECIES				
<u>INVERTEBRATES:</u>				
<i>Bombus crotchii</i> Crotch bumble bee	Fed: None CA: SCE	A bumble bee native to California and Baja, Mexico, but also reported from western Nevada. Inhabits the Mediterranean region, Pacific Coast, Western Desert, Great Valley, and adjacent foothills through most of southwestern California (USDA, 2012). Food plants consist of <i>Antirrhinum</i> , <i>Phacelia</i> , <i>Clarkia</i> , <i>Dendromecon</i> , <i>Eschscholzia</i> , and <i>Eriogonum</i> .	Suitable habitat present and three food plants were identified within the study area. One reported occurrence within 5 miles; nearest occurrence (Occ.#17) located ~1.8 miles to the east from a nonspecific location identified as Pleasanton from 1932; presumed extant. Five occurrences reported within 20 miles of the project footprint (CDFW 2022b).	Possible
<i>Bombus occidentalis</i> Western bumble bee	Fed: None CA: SCE	Historically a very common bee species in the western United States and western Canada, but populations from British Columbia to Central California have become extirpated or are severely declining. Food plants consist of <i>Melilotus</i> , <i>Cirsium</i> , <i>Trifolium</i> , <i>Centaurea</i> , <i>Chrysothamnus</i> , and <i>Eriogonum</i> .	Suitable habitat present on site within all habitat types supporting suitable food plants. One reported occurrence within 5 miles; nearest occurrence (Occ.#230) located ~1.8 miles to the east from a nonspecific location identified as Pleasanton from 1952; presumed extant. 23 occurrences reported within 20 miles of the project footprint (CDFW 2022b).	Possible

¹ Nine quad search query for the Diablo, Dublin, Hayward, La Costa Valley, Las Trampas Ridge, Livermore, Newark, Niles, and Tassajara USGS 7 ½ Minute Quads.

SPECIES NAME COMMON NAME	LISTING STATUS*	HABITAT REQUIREMENTS & ADDITIONAL NOTES	HABITAT SUITABILITY & LOCAL DISTRIBUTION	POTENTIAL FOR OCCURRENCE
<i>Branchinecta lynchi</i> Vernal pool fairy shrimp	Fed: FT, CH CA: None	Inhabits clear to tea-colored freshwater vernal pools in grass or mud bottomed swales, or basalt flow depression pools in unplowed grasslands (59 FR 48136, Eriksen and Belk, 1999). There are 32 known populations in the Central Valley from Shasta to Tulare counties, and along the Central and South Coast Ranges from Solano to San Benito counties (USFWS, 1994). Often occur in low densities and rarely co-occur with other branchiopod species (Eng et al., 1990, Simovich et al., 1992). Designated critical habitat encompasses 35 units totaling 597,821 acres in Jackson County in Oregon, and Alameda, Amador, Butte, Contra Costa, Fresno, Kings, Madera, Mariposa, Merced, Monterey, Napa, Placer, Sacramento, San Benito, San Joaquin, Alameda, Amador, Butte, Contra Costa, Fresno, Kings, Madera, Mariposa, Merced, Monterey, Napa, Placer, Sacramento, San Benito, San Joaquin counties in California (71 FR 7118).	No aquatic habitat present. No reported occurrences within 5 miles. A total of 17 reported occurrence within 20 miles of the project footprint to the east and northeast (CDFW 2022b). The study area is not located within designated critical habitat.	None
<i>Danaus plexippus plexippus pop. 1</i> Monarch Butterfly California overwintering population	Fed: FC CA: None	The Monarch butterfly is a large orange and black butterfly that migrates annually from North America to Central America over the course of several generations. Monarchs are host specific, laying their eggs exclusively on the leaves of milkweed (<i>Asclepius</i> spp.) plants. The larvae feed on the milkweed after hatching and enter the pupa stage within about two weeks of hatching and emerge as adults in 10-14 days. Reproductively active adults live for two-six weeks. The migratory adult form begins fall migration in August and may travel up to 2,500 miles to warmer climates in Central Mexico. During migration, adults will roost in large colonies for several days to weeks at a time. Along the California Coast, overwintering roosts typically occur in stands of eucalyptus, pine and cypress trees in proximity to milkweed. The winter migratory lifespan reaches >9 months and adults return to their northern range in the spring.	No suitable overwintering habitat present. No reported occurrences within 5 miles. A total of 7 occurrences reported within 20 miles of the project footprint to the south (CDFW 2022b).	None
<i>Lepidurus packardii</i> Vernal pool tadpole shrimp	Fed: FE, CH CA: None	A large, distinctive crustacean with an oval carapace and single, long pair of cercopods (59 FR 48136). Inhabits vernal pools and swales in the Sacramento Valley containing clear to highly turbid water; such pools are commonly found in grass bottomed swales of unplowed grasslands and are occasionally mud-bottomed and highly turbid (59 FR 48136). Designated critical habitat encompasses 18 units totaling 228,785 acres in Alameda, Amador, Butte, Colusa, Fresno, Kings, Madera, Mariposa, Merced, Sacramento, Shasta, Solano, Stanislaus, Tehama, Tulare, Yolo, and Yuba counties (71 FR 7118).	No aquatic habitat present. No reported occurrences within 5 miles. A total of 5 occurrences reported within 20 miles of the project footprint to the south from the Warm Springs Seasonal Wetlands Unit of the Edwards National Wildlife Reserve (CDFW 2022b). The study area is not located within designated critical habitat.	None

SPECIES NAME COMMON NAME	LISTING STATUS*	HABITAT REQUIREMENTS & ADDITIONAL NOTES	HABITAT SUITABILITY & LOCAL DISTRIBUTION	POTENTIAL FOR OCCURRENCE
FISHES:				
<i>Acipenser medirostris</i> Green sturgeon (Southern DPS)	Fed: FT, CH CA: AFS-V	The green sturgeon, southern DPS, is an anadromous fish that is found in marine waters from the Bering Sea to Ensenada, Mexico. The southern DPS includes all spawning populations south of the Eel River (exclusive), principally including the Sacramento River population; NMFS "Special Concern" designation refers to the northern DPS which includes spawning populations north of the Eel River (inclusive) (71 FR 17757). Locally, green sturgeon inhabit Suisun, San Pablo, and San Francisco bays, and coastal bays and estuaries from Monterey Bay north to Puget Sound. Spawning occurs in the Sacramento River between March and June; it may extend slightly longer, into July, in the Klamath River. Critical habitat includes coastal California waters from Monterey Bay, California, North to Cape Flattery, Washington; San Francisco Bay; Sacramento River and lower Feather River; Eastern reaches of the Sacramento-San Joaquin Delta; specified bays and estuaries in California, Oregon and Washington (74 FR 52300). Critical habitat does not include any freshwater tributaries feeding into these water bodies (74 FR 52300).	No aquatic habitat present. No reported occurrences within 5 miles (CDFW 2022b). The study area is not located within designated critical habitat.	None
<i>Hypomesus transpacificus</i> Delta Smelt	Fed: FT, CH CA: SE AFS-T	Inhabits brackish water in the Sacramento-San Joaquin Delta. Sacramento River as high as the confluence with the Feather River, Mokelumne River, Cache Slough, Montezuma Slough, San Pablo Bay, Suisun Bay, Suisun Marsh, Carquinez Strait, and Napa River and Marsh. Spawns in freshwater habitat between February and August in shallow water areas with submersed aquatic plants, suitable substrates and refugia. Important spawning habitat include Barker, Lindsey, Cache, Prospect, Georgiana, Beaver, Hog, and Sycamore sloughs and the Sacramento River in the Delta, and tributaries of northern Suisun Bay. Critical habitat includes: areas of all water and all submerged lands below ordinary high water and the entire water column bounded by and contained in Suisun Bay (including Grizzly and Honker Bays); Goodyear, Suisun, Cutoff, First Mallard and Montezuma sloughs; and the existing contiguous waters contained within the Delta (59 FR 65256).	No aquatic habitat present. No reported occurrences within 5 miles (CDFW 2022b). The study area is not located within designated critical habitat.	None

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<i>Oncorhynchus mykiss irideus</i> Steelhead (Central California Coast DPS Pop 8)	Fed: FT, CH CA: AFS-TH	An anadromous fish that spend several years in the ocean; returning to freshwater rivers and tributaries to spawn and rear. Listing includes all naturally spawned anadromous steelhead populations below natural and manmade impassable barriers in California streams from the Russian River (inclusive) to Aptos Creek (inclusive), and the drainages of San Francisco, San Pablo, and Suisun Bays eastward to Chipps Island at the confluence of the Sacramento and San Joaquin Rivers (70 FR 37160). Tributary streams to Suisun Marsh including Suisun Creek, Green Valley Creek, and an unnamed tributary to Cordelia Slough (commonly referred to as Red Top Creek), excluding the Sacramento-San Joaquin River Basin, as well as two artificial propagation programs: the Don Clausen Fish Hatchery, and Kingfisher Flat Hatchery/ Scott Creek (Monterey Bay Salmon and Trout Project) steelhead hatchery programs (70 FR 37160). Designated critical habitat encompasses 1,465 miles streams, 386 square miles estuary habitat in Lake, Mendocino, Sonoma, Napa, Marin, San Francisco, San Mateo, Santa Clara, Santa Cruz, Alameda, Contra Costa, and San Joaquin counties (70 FR 52488).	No aquatic habitat present. Species reported (Occ #2) from Alameda, Stonybrook, pirate, Welch, Indian Joe, W-Tree, and Arroyo Mocho creeks within 5 miles so the south (CDFW 2022b). The study area is not located within designated critical habitat.	None
<i>Spirinchus thaleichthys</i> Longfin smelt	Fed: FC CA: ST	An anadromous fish that inhabits coastal bays, estuaries and waters near the coastline from Prince William Sound in Alaska to the Sacramento-San Joaquin Delta. Spawning occurs in freshwater streams from December – February.	No aquatic habitat present. No reported occurrences within 5 miles (CDFW 2022b).	None
<u>AMPHIBIANS:</u>				
<i>Ambystoma californiense</i> California tiger salamander Central California DPS	Fed: FT, CH CA: ST, WL	A large terrestrial salamander that inhabits seasonal/semi-permanent water sources (3-4 months in duration) and adjacent upland habitat with small fossorial mammal activity in lowland grasslands, oak savannah and mixed woodlands. Range includes the Central Valley and Central Coast ranges from Colusa County south to San Luis Obispo and Kern counties from sea level to 3,460 feet (1,054 meters) in elevation with two disjunct populations within Sonoma County and Santa Barbara County. Species have been documented traveling distances up to 1 mile (1.6 km) (Austin and Shaffer, 1992). Designated critical habitat encompasses 199,109 acres in 20 counties and is grouped into 4 regions: Central Valley, Southern San Joaquin, East Bay and Central Coast (70 FR 49380). The East Bay Region includes Alameda County, south to Santa Benito and Santa Clara counties, and west to the eastern portions of San Joaquin and Merced counties (70 FR 49380). Primary constituent elements include: (1) standing bodies of fresh water that support inundation during winter rains and hold water for a minimum of 12 weeks in a year of average rainfall; (2) upland habitats adjacent and accessible to breeding ponds that contain small mammal burrows or other underground habitat; and (3) accessible upland dispersal habitat between occupied locations that allow for movement between such sites (70 FR 49380).	No suitable aquatic within project footprint but five potential breeding ponds located 1,100 feet to 1 mile to the west and south. A livestock pond 0.8-mile to the west supported breeding in 2015. No ground squirrel burrows were observed in the study area and only a couple of gopher burrows were present. Ground squirrel activity was observed on the neighboring parcel but was sparse. Sixteen reported occurrences within 5 miles of the project footprint; the nearest occurrence (Occ.#1095) located 0.8-mile to the west from a berm pond along the eastern tributary to Sinbad Creek consisting of one metamorph and one adult during sampling in 2015 (CDFW 2022b). One other occurrence (Occ.#955) located ~2.1 miles west of the project. All others are located east of I-680. The study area is not located within designated critical habitat.	Not expected

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<p><i>Rana boylei</i> pop. 4 Foothill yellow-legged frog Central Coast DPS</p>	<p>Fed: FPT CA: SE</p>	<p>The foothill yellow-legged frog ranges from the Cascade Mountains in Oregon south to the Transverse Ranges in Los Angeles County, and from the coast to western Sierra Nevada foothills (Stebbins and McGinnis 2012, CDFG 2010). It inhabits small to moderately-sized, perennial streams with characterized by cobble-rocky substrate and shallow, flowing water in valley-foothill riparian, hardwood-conifer, mixed conifer, coastal scrub, mixed chaparral and wet meadow communities (Hayes and Jennings 1988, Jennings 1988). Larvae feed on algae, while adults feed primarily on terrestrial and aquatic insects (Fitch 1938). Reproduction occurs between March and June, and requires 15 weeks to reach metamorphosis typically between July and September (Storer 1925, Jennings 1988).</p>	<p>No suitable aquatic habitat on site. One reported occurrences within 5 miles; nearest occurrence (Occ.#2123) located ~3.6 miles to the south between 1918 and 1953. Local population is extirpated (CDFW 2022b).</p>	<p>None</p>
<p><i>Rana draytonii</i> California red-legged frog</p>	<p>Fed: FT, CH CA: ST, SSC</p>	<p>A medium-sized frog that inhabits lowlands & foothills in or near permanent sources of deep water with dense, shrubby or emergent riparian vegetation up to 4,921 feet (1,500 meters) in elevation (Jennings and Hayes 1994, Bulger et al. 2003, Stebbins and McGinnis 2012). Range extends from Redding to Baja California, Mexico with hybridization occurring with the California red-legged frog from the Oregon border to Marin County. Breeding occurs between November and April in standing or slow moving water with emergent vegetation, such as cattails (<i>Typha</i> spp.), tules (<i>Scirpus</i> spp.) or overhanging willows (<i>Salix</i> spp.) (Hayes and Jennings 1988). Larvae undergo metamorphosis 3 ½ to 7 months following hatching (Jennings and Hayes 1984, 1994). Designated critical habitat encompasses 1,636,609 acres in 20 counties and is grouped into 4 regions: Central Valley, Southern San Joaquin, East Bay and Central Coast (75 FR 12816).</p>	<p>No suitable aquatic breeding habitat on site, but four confirmed breeding ponds are located within 1,000 LF and 1-mile of the study area. The study area provides suitable upland foraging, dispersal, and refugia habitat especially during rainy season or cooler periods. Forty occurrences reported within 5 miles; nearest occurrence (Occ.#1720) is located 1,000 LF to the west and occurrence (Occ. #1721) is located 1040 LF to the south (CDFW 2022b). The study area is not located within designated critical habitat</p>	<p>Possible</p>

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REPTILES:				
<i>Masticophis lateralis euryxanthus</i> Alameda whipsnake	Fed: FT, CH CA: ST	The Alameda whipsnake is a subspecies of the California whipsnake, <i>Masticophis lateralis</i> , which inhabits the foothills and mixed deciduous and pine forests of the Sierra Nevada and Coast Range mountains from Siskiyou County in northern California to the flatland desert in Cañon de Los Reyes in southern Baja California (Stebbins, 2003). The Alameda whipsnake inhabits the inner Coast Ranges in western and central Contra Costa and Alameda counties (Jennings, 1983; McGinnis, 1992; Swaim, 1994). Habitat fragmentation has restricted its range into five recognized subpopulations: Tilden-Briones population, Oakland-Las Trampas population, Hayward-Pleasanton Ridge population, Mount Diablo-Black Hills population, and Sunol-Cedar Mountain population. Designated critical habitat encompasses 154,834 acres in Alameda, Contra Costa and Santa Clara counties (71 FR 58176). Primary constituent elements include: (1) scrub/shrub communities with a mosaic of open and closed canopy; (2) woodland or annual grassland plant communities contiguous to lands containing PCE 1; and (3) lands containing rock outcrops, talus, and small mammal burrows within or adjacent to PCE 1 and or PCE 2 (71 FR 58176).	Suitable habitat is present throughout the study area. Rocky outcrops in the scrub and woodlands provide suitable refugia habitat. Sixteen reported occurrences within 5 miles (CDFW 2022b). The nearest occurrence (Occ. #39) located 1.2 miles to the north on Moller Ranch. The study area is located within designated critical habitat unit AWS-3 and contains all three PCE's.	Possible
BIRDS:				
<i>Agelaius tricolor</i> Tricolored blackbird (nesting)	Fed: None CA: ST, SSC BCC, RWL	Highly colonial species, most numerous in central valley & vicinity. Largely endemic to California. Nest in emergent vegetation within aquatic and riparian habitats. Breeds from mid-March through early August; double-brooded (Baicich & Harrison, 2005; Shuford and Gardali, 2008).	No suitable nesting habitat present. Two reported occurrences within 5 miles (CDFW 2022b). Occ.#254 located 3.8 miles to the east at the Kaiser Gravel Company and Occ.#27 located 4.8 miles to the south near the intersection of Alameda Creek and I-680.	None
<i>Aquila chrysaetos</i> Golden eagle (nesting & wintering)	Fed: None CA: WL, FP BCC	A large diurnal raptor that nests on cliffs and in large trees in open areas. Forages in open terrain including grasslands, deserts, savannahs and early successional stages of forest and shrub habitats (Kochert et al., 2002). A year-round resident in the greater Bay Area. Breeding begins in February to late May; single-brooded (Baicich & Harrison, 2005)	Suitable nesting and wintering habitat present; however, no tall, large trees typical of nest selection. Suitable foraging habitat throughout grasslands. One reported occurrence within 5 miles; nearest occurrence (Occ. #55) located ~4.9 miles to the west in 1994 (CDFW 2022b).	Not expected
<i>Buteo swainsoni</i> Swainson's hawk	Fed: None CA: ST	A gregarious summer resident that inhabits open grasslands, shrublands, woodlands, and agricultural areas throughout the Central Valley and the valleys of the Sierra Nevada in Inyo and Mono counties (England et al. 1997). Nests are built in a variety of trees and shrubs; breeding occurs from March to August and are single brooded (Baicich & Harrison 2005).	Site is west of the species nesting range. No reported occurrences within 5 miles and no nesting occurrences west of I-680 (CDFW 2022b).	None

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<i>Charadrius alexandrinus nivosus</i> Western snowy plover (nesting)	Fed: FT, CH CA: SSC NABCI:RWL	Inhabits beaches, mud flats, estuaries, salt evaporation ponds and inland river channels with banks for foraging. Breeds on sandy beaches, dunes, levees, river banks and dry salt evaporation beds along the California coastline typically in areas with minimal human disturbance. San Francisco Bay is within USFWS Recovery Unit 3 (USFWS, 2007). Breeding begins in March; double-brooded (Baicich & Harrison, 2005). Federal listing applies only to the Pacific coastal population that nests within 50 miles of the Pacific Ocean on the mainland coast, peninsulas, offshore islands, bays, estuaries, or rivers of the U.S. and Baja, CA; "Species of Special Concern" designation refers to both the coastal & interior populations (USFWS, 2007). Critical habitat was revised on June 19, 2012 and encompasses 4 units and 6,077 acres in Washington, 9 units and 2,112 acres in Oregon, and 47 units and 16,337 acres in California. Counties in California with designated critical habitat include: Del Norte, Humboldt, Mendocino, Marin, Napa, Alameda, San Mateo, Santa Cruz, Monterey, San Luis Obispo, Santa Barbara, Ventura, Los Angeles, Orange and San Diego Counties (77 FR 36728).	No suitable habitat present. Project is outside the species known range. No reported occurrences within 5 miles (CDFW 2022b). The study area is not located within designated critical habitat.	None
<i>Elanus leucurus</i> White-tailed kite (nesting)	Fed: None CA: FP	Inhabits grasslands, agriculture fields, oak woodlands, savannah and riparian habitats in rural and urban areas. Feeds primarily on California voles. Year-round resident of Central and Coastal California. Breeding begins in February; sometimes double-brooded (Baicich & Harrison, 2005).	Suitable nesting habitat present among the mature trees and suitable foraging habitat throughout study area. One reported occurrence within 5 miles; nearest occurrence (Occ. #158) located ~4.1 miles to the north from 2009 (CDFW 2022b). Species regularly observed foraging in the region.	Possible
<i>Falco mexicanus</i> Prairie falcon	Fed: None CA: WL	Nests on cliffs & at times in old raven or eagle stick nests on cliff, bluff, or rock outcrop. Inhabits perennial grasslands, savannahs, rangeland, some agricultural fields, & desert scrub communities. Breeding begins in April; single-brooded (Baicich & Harrison 2005).	No suitable nesting habitat present. One reported occurrence within 5 miles; nearest occurrence (Occ. #485) located ~4 miles to the southeast from a nonspecific location identified as La Costa Valley USGS quad in 2008 (CDFW 2022b).	None
<i>Falco peregrinus anatum</i> American peregrine falcon	Fed: Delisted CA: Delisted FP	Typically a year-round resident in California and most common along the coast. Nests on cliffs, but frequently uses man-made structures such as bridges and buildings. Nests are generally located close to water bodies with abundant avian prey. Breeding begins in March; single-brooded (Baicich & Harrison, 2005).	No suitable nesting habitat present. One reported occurrence within 5 miles; nearest occurrence (Occ. #2) located ~4 miles to the southeast from a nonspecific location identified as La Costa Valley USGS quad in 2008 (CDFW 2022b).	None

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<i>Gymnogyps californianus</i> California condor	Fed: FE, CH CA: SE, FP NABCI:RWL	A large vulture with a 9.5-foot wingspan. Feeds exclusively on carrion. Inhabits a range of vegetation communities including grassland and woodlands along the California-Baja California coastline. Habitat preference is strongly correlated to food availability. Breeding pair formation occurs in late-fall to winter and egg laying occurs from January to February. Species is single-egged and single-brooded and do not breed every year.	No suitable nesting habitat present. No reported occurrences within 20 miles (CDFW 2022b). The study area is not located within designated critical habitat.	None
<i>Laterallus jamaicensis coturniculus</i> California black rail	Fed: None CA: ST, FP NABCI:RWL	Smallest of the rails; inhabits tidal marshes, freshwater wetlands and marshes. Wintering habitat similar to breeding habitat. A year-round resident of the San Francisco Bay Area. Breeding begins in March; sometimes double-brooded (Baicich & Harrison, 2005).	No suitable habitat present. Project is outside the species known range. No reported occurrences within 5 miles (CDFW 2022b).	None
<i>Rallus obsoletus obsoletus</i> California Ridgway's rail (=California clapper rail)	Fed: FE CA: SE, FP NABCI:RWL	One of four subspecies from the obsoletus group, restricted to the San Francisco Bay Area. Inhabits coastal wetlands dominated by pickleweed (<i>Salicornia</i> spp.) and cordgrass (<i>Spartina</i> spp.). Wintering habitat similar to breeding habitat. Breeding begins in March; single-brooded (Baicich & Harrison, 2005).	No suitable habitat present. Project is outside the species known range. No reported occurrences within 5 miles (CDFW 2022b).	None
<i>Riparia riparia</i> Bank swallow (nesting)	Fed: None CA: ST	Nests in colonies in vertical banks with friable soils. Breeds from April to August. Most of California's nesting colonies occur along the upper Sacramento River. Breeding begins in April; double-brooded (Baicich & Harrison, 2005).	No suitable habitat present. Project is outside the species known range. No reported occurrences within 5 miles (CDFW 2022b).	None
<i>Sternula antillarum browni</i> California least tern (nesting colony)	Fed: FE CA: SE, FP NABCI:RWL	Breeds in colonies on bare soil, sand and mudflats along the California coast and the San Francisco Bay Area. Winters south to Mexico. Breeding begins in May; single-brooded (Baicich & Harrison, 2005).	No suitable habitat present. Project is outside the species known range. No reported occurrences within 5 miles (CDFW 2022b).	None
<u>MAMMALS:</u>				
<i>Vulpes macrotis mutica</i> San Joaquin kit fox	Fed: FE CA: ST	The smallest North American canid, the kit fox inhabits valley bottom and foothills from southern Kern County north to Contra Costa, Alameda, and San Joaquin Counties on the west, and near La Grange, Stanislaus County on the east side of the Central Valley and some of the larger scattered islands of natural land on the Valley floor in Kern, Tulare, Kings, Fresno, Madera, and Merced Counties (USFWS 1998). Species occupies habitats with open or low vegetation with loose soils. In the northern portion of their range, they occupy grazed grasslands and to a lesser extent valley oak woodlands (USFWS 1998). Kit fox are also found in grazed grasslands including areas adjacent to tilled or fallow fields, and suburban settings (USFWS 1998). Requires loose-textured sandy soils for burrowing, and a suitable prey base.	No suitable habitat present. Project is outside the species known range. No reported occurrences within 5 miles (CDFW 2022b).	None
<i>Reithrodontomys raviventris</i> Salt-marsh harvest mouse	Fed: FE CA: SE, FP	A small endemic, pickleweed (<i>Salicornia</i> spp.) obligate species of tidal marshes of the San Francisco Bay Area. Requires adjacent upland tidal zones for escape cover during floods. Two recognized subspecies, <i>R. r. halicoetes</i> that inhabits San Pablo and Suisun bays and <i>R. r. raviventris</i> that inhabits the South San Francisco Bay including Corte Madera and Richmond marshes.	No suitable habitat present. Project is outside the species known range. No reported occurrences within 5 miles (CDFW 2022b).	None

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<u>SENSITIVE AND LOCALLY RARE SPECIES</u>				
<u>INVERTEBRATES:</u>				
<i>Bombus caliginosus</i> Obscure bumble bee	Fed: None CA: SA	The obscure bumble bee is known to occur in coastal areas, utilizing <i>Baccharis</i> , <i>Cirsium</i> , <i>Lupinus</i> , <i>Lotus</i> , <i>Grindelia</i> and <i>Phacelia</i> spp. Recorded from Alameda, Contra Costa, Del Norte, Humboldt, Marin, Mendocino, Monterey, San Luis Obispo, San Mateo, Santa Barbara and Sonoma counties.	Suitable habitat is present among one of the host plants, <i>Lupinus</i> spp. No reported occurrences within 5 miles, but species documented within 20 miles of the study area to the north and south (CDFW 2022b).	Possible
<i>Efferia antiochi</i> Antioch efferian robberfly	Fed: None CA: SA	Inhabits sand dunes. Recorded from Contra Costa and Fresno counties.	No suitable habitat present. Outside the species known range. No reported occurrences within 5 miles (CDFW 2022b).	None
<i>Gonidea angulata</i> Western ridged mussel	Fed: None CA: SA	A freshwater mussel measuring 5 inches that inhabits streams and lakes with cool, well-oxygenated, low gradient water and sand, clay, silt, and cobble substrates. Ranges from California, Oregon, Washington, Idaho, and Nevada to British Columbia. A long-lived mussel that reaches maturity at 7 years and lives up to 30 years. Larvae present from March through July. Species has a short parasitic lifestage where the larvae attach to fish gills for several weeks to month from March to August before detaching and settling into the substrate. Detected on the gills of minnows, sculpin, trout, and sunfish species.	No aquatic habitat present. One reported occurrence within 5 miles; nearest occurrence (Occ.#135) located ~3.3 miles to the south from Alameda Creek (CDFW 2022b).	None
<i>Helminthoglypta nickliniana bridgesi</i> Bridges' coast range shoulderband	Fed: None CA: SA	Inhabits rock piles, thistles and weedy grasslands on open hillsides. Recorded in Alameda and Contra Costa counties, on the west slope of Berkeley Hills, Marsh Creek Canyon, Marsh Creek Springs, Tilden Park and Point Isabel (Roth, 1999).	Suitable habitat present among the grasslands and rocky areas. No reported occurrences within 5 miles (CDFW 2022b).	Possible
<i>Linderiella occidentalis</i> California linderiella	Fed: None CA: SA	An aquatic crustacean in the Anostroca family, smaller than the vernal pool fairy shrimp with distinctive red eyes. Inhabits small, clear-water vernal pools and lakes, earth slumps, grassed swales and basal-flow depression pools. Fairly tolerant of high water temperatures and turbidity. Most common fairy shrimp in the Central Valley.	No suitable aquatic habitat present. Two reported occurrences within 5 miles; both located approximately 4.8 miles to the northeast at the Parks Reserve Forces Training Area (CDFW 2022b).	None
<i>Microcina lumi</i> Lum's micro-blind harvestman	Fed: None CA: SA	Endemic to the San Francisco Bay Area, M. lumi is one of six Microcina species. Inhabits grasslands under serpentine rocks (Briggs and Ubick, 1989). Known from one location near Fairmont Drive in Hayward, Alameda County.	No suitable habitat present. No reported occurrences within 5 miles (CDFW 2022b).	None
<u>FISHES:</u>				
None				
<u>AMPHIBIANS:</u>				
None				

SPECIES NAME COMMON NAME	LISTING STATUS*	HABITAT REQUIREMENTS & ADDITIONAL NOTES	HABITAT SUITABILITY & LOCAL DISTRIBUTION	POTENTIAL FOR OCCURRENCE
REPTILES:				
<i>Emys marmorata</i> Western pond turtle	Fed: None CA: SSC	A moderate sized freshwater turtle that inhabits permanent or nearly permanent bodies of water and low gradient slow moving streams below 6,000 feet elevation. Needs basking sites and sandy banks or grassy open fields in upland areas for egg-laying. Range extends from Washington to the northern Bay Area counties along the Pacific slope drainages.	No suitable aquatic habitat present. Two potential breeding ponds located ~1,100 feet to the west, 1,070 feet to the south. One occurrence reported within 5 miles; nearest occurrences (Occ.#59) located in Alameda Creek one-mile west of Sunol ~4.6 miles to the south (CDFW 2022b).	None
BIRDS				
<i>Accipiter cooperii</i> Cooper's hawk (nesting)	Fed: None CA: WL	Inhabits dense stands of oak woodlands, riparian deciduous forests, or other forest habitats often near water & suburban areas. Hunts in broken woodlands & along forest edges. Breeding begins in April; single-brooded (Baicich & Harrison, 2005).	Suitable nesting habitat present among mature trees on site. One reported occurrence within 5 miles; Occ. #113 located 4.9 miles to the south (CDFW 2022b).	Possible
<i>Accipiter striatus</i> Sharp-shinned hawk (nesting)	Fed: None CA: WL	Inhabits north-facing slopes in conifers, including ponderosa pine, black oak, & Jeffrey pines, preferably in riparian areas. Forages primarily for small birds along woodland edges & openings, hedgerows, brushy pastures, & shorelines. Breeding begins in April; single-brooded (Baicich & Harrison, 2005).	Suitable nesting habitat present among mature trees on site. One reported occurrence within 5 miles; Occ. #1 located 4.8 miles to the west among a young stand of coast live oaks (CDFW 2022b).	Possible
<i>Ardea herodias</i> Great blue heron (nesting colony)	Fed: None CA: SA	A large wading bird that inhabits a variety of aquatic habitats including shores, tideflats, marshes, swamps, ponds, lakes, rivers and streams. Nests colonially in large trees near water bodies. Breeding begins in March; single-brooded (Baicich & Harrison, 2005).	No suitable nesting habitat present. One reported occurrence within 5 miles; Occ. #130 located 4.9 miles to the south (CDFW 2022b).	None
<i>Athene cunicularia</i> Burrowing owl (burrow sites & some wintering sites)	Fed: None CA: SSC,BCC	Valley bottoms and foothills with low vegetation and fossorial mammal activity. Listing includes wintering observations with/without a burrow in San Francisco, Ventura, Sonoma, Marin, Napa and Santa Cruz counties. Breeding begins in March; single-brooded (Baicich & Harrison, 2005).	No suitable burrow habitat on site based on the lack of ground squirrel burrows. Suitable burrow habitat is present in sparse colonies on adjacent parcels. Twenty-one reported occurrences within 5 miles; nearest occurrences (Occ.#90) located 1.7 miles to the northeast near an empty business park in Pleasanton (CDFW 2022b).	Not expected
<i>Buteo regalis</i> Ferruginous hawk	Fed: None CA: WL	Breeds in the northern states and Canada; winters south from California and Texas to Mexico. Wintering habitat consists of open grasslands, deserts and cultivated fields. Breeding begins in April; single-brooded (Baicich & Harrison 2005).	Suitable wintering habitat throughout the study area. Species does not breed in the region. No reported occurrences within 5 miles (CDFW 2022b).	Possible
<i>Circus hudsonius</i> Northern harrier	Fed: None CA: SSC, BCC	Inhabits both freshwater and saltwater marshes and adjacent upland grasslands. Nests on the ground in tall grasses in grasslands and meadows. Breeding begins in March; single-brooded (Baicich & Harrison, 2005).	No suitable nesting habitat present. No reported occurrences within 5 miles (CDFW 2022b).	None

SPECIES NAME COMMON NAME	LISTING STATUS*	HABITAT REQUIREMENTS & ADDITIONAL NOTES	HABITAT SUITABILITY & LOCAL DISTRIBUTION	POTENTIAL FOR OCCURRENCE
<i>Coturnicops noveboracensis</i> Yellow rail	Fed: None CA: SSC,BCC NABCI:RWL	The smallest rail in North America. Primarily distributed across central/eastern Canada and the central states, wintering along the southern and southeastern coastlines from Texas to North Carolina. A disjunct population overwinters along the California coast from Humboldt County to Riverside County and eastward to Mono County (Leston and Bookhout, 2015). In the San Francisco Bay it inhabits primarily tidal and freshwater marshes. Prefers drier vegetation such as cordgrass <i>Spartina</i> spp. and <i>Distichlis</i> spp. in coastal marshes.	No suitable habitat present. No reported occurrences within 5 miles (CDFW 2022b).	None
<i>Eremophila alpestris actia</i> California horned lark	Fed: None CA: WL	Common, abundant resident in a variety of open habitats, usually where large trees and shrubs are absent, ranging from low-elevation grasslands and deserts to dwarf shrub habitats above tree line. Found throughout much of the state. Less common in mountainous areas of the north coast and in conifer and chaparral habitats. Breeding begins in late-February; double to treble-brooded (Baicich & Harrison 2005).	Suitable nesting habitat present among woodlands and scrub habitat. No reported occurrences within 5 miles (CDFW 2022b).	Possible
<i>Geothlypis trichas sinuosa</i> Saltmarsh common yellowthroat	Fed: None CA: SSC,BCC	Year-round resident of the San Francisco Bay Area. Inhabits dense vegetation in wetlands, marshes, estuaries, prairies and riparian areas of San Francisco and San Pablo bays, and along the coastal areas of Marin, San Francisco, and San Mateo counties (Shuford and Gardali, 2008). Breeds from mid-March to late July; double-brooded (Baicich & Harrison, 2005; Shuford and Gardali, 2008).	No suitable nesting habitat present. No reported occurrences within 5 miles (CDFW 2022b).	None
<i>Melospiza melodia pusillula</i> Alameda song sparrow	Fed: None CA: SSC,BCC	A medium-sized sparrow that inhabits marshes cord grass (<i>Spartina</i> spp.), pickleweed (<i>Salicornia virginica</i>), gumplant (<i>Grindelia stricta</i>), rushes (<i>Juncus</i> spp.); also known to frequent tangles bordering sloughs. One of four subspecies in the San Francisco Bay Area. Endemic to the southern San Francisco Bay tidal marshlands. Species prefers a balanced mix of tidally-influenced vegetation with suitable height for cover and breeding, and bare ground for foraging. Species rarely strays from areas of suitable tidal marsh habitat. Breeding begins in April; often triple-brooded (Baicich & Harrison, 2005).	No suitable nesting habitat present. Outside the subspecies known range. No reported occurrences within 5 miles (CDFW 2022b).	None
<i>Setophaga petechia</i> Yellow warbler	Fed: None CA: SSC	Species protection includes the subspecies <i>S. p. morvorni</i> & <i>S. p. brewsteri</i> , which are tracked under the full species, <i>S. petechia</i> due to difficulty distinguishing them. <i>S. p. sonorana</i> , which nests in California only along the Colorado River is tracked separately. Nests in dense, shrubby thickets dominated by willows along water courses and wet meadows. Builds nests in a variety of riparian trees, most commonly willows (<i>Salix</i> spp.) and cottonwoods (<i>Populus</i> spp.). Occasionally breeds in mixed-conifer forests with shrubby understories (Shuford and Gardali, 2008). Breeds from April to late July; sometimes double-brooded (Baicich and Harrison, 2005; Shuford and Gardali, 2008).	No suitable nesting habitat present. No reported occurrences within 5 miles (CDFW 2022b).	None

SPECIES NAME COMMON NAME	LISTING STATUS*	HABITAT REQUIREMENTS & ADDITIONAL NOTES	HABITAT SUITABILITY & LOCAL DISTRIBUTION	POTENTIAL FOR OCCURRENCE
MAMMALS:				
<i>Antrozous pallidus</i> Pallid bat	Fed: None CA: SSC WBWG-H	Inhabits rocky terrain in open areas in lowlands, foothills and mountainous areas near water throughout California below 2,000 meters. Roost alone or in small numbers (<200) in caves, rock crevices, mines, hollow trees (e.g. coast redwoods, giant sequoias, oaks, exfoliating Ponderosa pine and valley oak bark, and fruit trees), buildings and bridges in arid regions. Pallid bats are opportunistic generalists that eat a variety of insects, small lizards and rodents.	Suitable roosting habitat present among rock crevices and tree hollows. Suitable foraging habitat throughout entire site. Three reported occurrences within 5 miles; nearest occurrence (Occ. #331) located 1.5 miles to the north from a bridge roost in Niles Canyon (CDFW 2022b).	Possible
<i>Corynorhinus townsendii</i> Townsend's western big-eared bat	Fed: None CA: SSC WBWG-H	Inhabits caves and mines, but may also infrequently use bridges, buildings, rock crevices and hollows of large trees in coniferous forests, mixed mesophytic forests, deserts, native prairies, riparian communities, coastal lowlands, cultivated valleys and nearby hills characterized by mixed vegetation throughout California below 3,300 meters (10,825 feet). Exhibits high site fidelity and is highly sensitive to disturbance. As a moth specialist, this species forages along edge habitats near water; may travel long distances during foraging bouts.	Suitable roosting habitat present among rock crevices and tree hollows. One reported occurrence within 5 miles; nearest occurrence (Occ.#422) located 3.7 miles near Sycamore Creek Way in 2012 (CDFW 2022b).	Possible
<i>Dipodomys heermanni berkeleyensis</i> Berkeley kangaroo rat	Fed: None CA: SA	Inhabits open grass hilltops and open spaces in chaparral and blue oak/foothill pine woodlands; needs fine, deep, well-drained soils for burrowing. Past collections of the species have been made in the vicinity of Mount Diablo, the Berkeley Hills, Strawberry Canyon, Orinda Park Pool, Calaveras Reservoir, and Siesta Valley. More recent – and as-yet unconfirmed – kangaroo rat occurrences have been reported in the Sunol Valley Regional Wilderness well within the species recognized range. Populations in the vicinity of the Berkeley Hills are considered extirpated due to predation by domestic cats.	No suitable habitat present. No reported occurrences within 5 miles (CDFW 2022b).	None
<i>Eumops perotis californicus</i> Western mastiff bat	Fed: None CA: SSC WBWG-H	Primarily a cliff roosting species. Inhabits a variety of vegetation communities near suitable cliff roosting habitat throughout central and southern California below 1,400 meters (4,593 feet) in California (Siders, 2005). Roosts in rocky cliff crevices, but will also use similar openings in boulders and buildings (Siders, 2005). Often forages high above the ground in open areas and over great distances. Highly sensitive to human disturbance.	No suitable cliff roosting habitat present. No reported occurrences within 5 miles (CDFW 2022b).	None
<i>Lasiurus cinereus</i> Hoary bat	Fed: None CA: SA WBWG-M	Ubiquitous throughout California. A solitary foliage rooster that prefers evergreens, but will use deciduous trees in forested habitats, particularly in edge habitat (Bolster, 2005a). May forage in small to large groups. Feeds primarily on moths, but will eat a variety of other insects. Migrates great distances.	Suitable roosting habitat is present among mature trees in the woodlands along edge habitat. No reported occurrences within 5 miles (CDFW 2022b).	Possible

SPECIES NAME COMMON NAME	LISTING STATUS*	HABITAT REQUIREMENTS & ADDITIONAL NOTES	HABITAT SUITABILITY & LOCAL DISTRIBUTION	POTENTIAL FOR OCCURRENCE
<i>Myotis yumanensis</i> Yuma myotis bat	Fed: None CA: SA WBWG-L	A riparian obligate species. Ubiquitous throughout California. Inhabits riparian areas near permanent water sources. Roosts in a variety of habitats including bridges, buildings, caves, mines, cliff crevices and trees. Forages above water and in riparian areas.	No suitable riparian roosting habitat present. One reported occurrence within 5 miles; nearest occurrence (Occ. #78) located 1.5 miles to the north from a bridge roost in Niles Canyon (CDFW 2022b).	None
<i>Neotoma fuscipes annectens</i> San Francisco dusky-footed woodrat	Fed: None CA: SSC	One of eleven recognized subspecies. Inhabits oak and riparian woodlands with a well-developed understory in the San Francisco Bay Area. They exhibit high site fidelity and may live in the same nest community for generations. Nest structures are key indicator of their presence and are easily identified by their conical appearance.	Suitable habitat present among the oak woodlands. No nest middens observed on site. Two reported occurrence within 5 miles; nearest occurrences (Occ.#6) located 4.8 miles to the south and (Occ. #11) located 4.9 miles to the northwest (CDFW 2022b).	Not expected
<i>Sorex vagrans halicoetes</i> Salt-marsh wandering shrew	Fed: None CA: SSC	A small, insectivorous rodent that inhabits tidal marshes of the South San Francisco Bay. Typically found in areas with dense cover dominated by pickleweed (Californian spp.), abundant prey and fairly continuous ground moisture.	No suitable habitat present. Outside species known range. No reported occurrences within 5 miles (CDFW 2022b).	None
<i>Taxidea taxus</i> American badger	Fed: None CA: SSC	A large mustelid that inhabits open areas with friable soils within woodland, grassland, savannah and desert habitats. A fossorial mammal that preys predominately on ground squirrels (<i>Ammospermophilus</i> and <i>Spermophilus</i> spp.) and pocket gophers (<i>Thomomys</i> spp.). Mating occurs in late summer; young are born in March and April (Jameson and Peeters, 2004).	Marginal habitat present. Paucity of small mammal burrows observed throughout site but sparsely present in neighboring parcels. One reported occurrence within 5 miles; nearest occurrences (Occ.#63) located ~4.8 miles to the northeast from Camp Parks (CDFW 2022b).	Not expected

* Explanation of State and Federal Listing Codes

Federal listing codes:

- FE Federally listed as Endangered
- FT Federally listed as Threatened
- FPE Federally proposed for listing as Endangered
- FPT Federally proposed for listing as Threatened
- FPD Federally proposed for delisting
- FC Federal candidate species (former Category 1 candidates)
- SC Species of Concern (NMFS regulated species only)
- CH Critical Habitat (Proposed or Final) is designated
- SSC Species of Special Concern designated by the Marine Mammal Commission

California listing codes:

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

AFS American Fisheries Society identifies marine, estuarine and diadromous fish species that are at risk of extinction in North America. The AFS has designated the following four classifications in order of conservation importance EN – Endangered, TH – Threatened, VU – Vulnerable, and CD – Conservation Dependent.

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

NABCI North American Bird Conservation Initiative: The North American Bird Conservation Initiative is a coalition of government agencies and private organizations that works to ensure the long-term health North America’s native bird populations. They publish an annual State of the Birds report which includes a watch list of bird species in need of conservation help. Species on the list are assigned to either the RWL - Red Watch List for species with extremely high vulnerability, or YWL - Yellow Watch List for species that may be range restricted or may be more widespread but with declines and high threats. More information is available at: <http://stateofthebirds.org>.

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

WBWG The Western Bat Working Group. H – High Priority indicates species that are imperiled or are at high risk of imperilment based on available information on distribution, status, ecology and known threats; M – Medium Priority indicates a lack of information to assess the species’ status; L – Low Priority indicates relatively stable populations based on available data.