# Appendix D Special-Status Species Considered



Common Name	Listing Status USFWS/	General Habitat / Period of Identification or	Potential for Species Occurrence Within				
Scientific Name	CDFW/Other	Flowering Period	Project Study Area				
	Species Listed or Proposed for Listing						
Plants							
Pallid manzanita Arctostaphylos pallida	FT/CE/1B.1	Broadleafed upland forest, closed-cone coniferous forest, chaparral, cismontane woodland, coastal scrub. Requires fire for reproduction. 185-465 m. Blooms February – March	<b>Absent.</b> Suitable habitat not found onsite. Project area is outside species' known distribution. Not observed during 2007, 2008, or 2020 surveys.				
Tiburon paintbrush Castilleja affinis var. neglecta	FE/CT/1B.2	Open serpentine grassland slopes. 40-430m. Blooms April – June	<b>Absent.</b> Suitable habitat not found onsite. No occurrences documented within 10 miles of the Project site.				
soft bird's-beak  Chloropyron molle  ssp. molle	FE/CR/1B.2	Occurs in coastal salt marsh, marshes, and swamps. Blooms July – November	<b>Moderate.</b> Suitable habitat found within the marshes of the Project site. Nearest occurrence documented 2 miles northeast of the Project site in Hastings Slough among salt marsh vegetation. Typically occurs within more extensive saltmarsh communities than present within the Project study area.				
Suisun thistle Cirsium hydrophilum var. hydrophilum	FE//1B.1	Restricted to the upper reaches of tidal marsh. 0 – 20m. Blooms July – September	Low. Marginally suitable habitat is found within upper margins of the brackish marsh within the Project site. Only known occurrences are documented on Grizzly Island on the north side of Suisun Bay and more than 10 miles from the Project site.				
Mt. Diablo bird's-beak Cordylanthus nidularius	/CR/1B.1	Occurs in chaparral. 600-800m. Blooms July – August	<b>Absent.</b> Suitable habitat not found in the Project study area which is outside of the understood species' range.				
Contra Costa wallflower Erysimum capitatum var. angustatum	FE/CE/1B.1	Coastal strand and inland dunes; known only to Antioch Dunes. 3 – 20m. Blooms March - July	<b>Absent.</b> Suitable habitat not found in the Project study area which is outside of the understood species' range.				
Santa Cruz tarplant Holocarpha macradenia	FT/CE/1B.1	Coastal prairie, valley and foothill grassland. Found on light, sandy soil or sandy clay; often with non-natives. 10-260 m.  Blooms June – October	<b>Absent.</b> Project study area is outside of the understood species' range. Occurrences within 10 miles were reintroduced to Lower Sather Canyon and thought to be extirpated.				
Contra Costa goldfields Lasthenia conjugens	/CE/1B.1	Occurs in cismontane woodland, playas, valley and foothill grassland, vernal pools. 4-180m. Blooms March – June	<b>Low.</b> Marginally suitable habitat found within grassland and alkali meadow of the Project site. Nearest extant occurrence is located 9 miles west of the Project site near the headwaters of Rodeo Creek.				
Mason's lilaeopsis <i>Lilaeopsis masonii</i>	/CR/1B.1	Occurs in freshwater and brackish marshes and swamps, riparian scrub. 0-10m. Blooms April – November	<b>Moderate.</b> Suitable habitat is found within the Project site. Species is locally common to Suisun Bay though occurrences documented closer to Bay margins than the Project site among more extensive brackish marsh communities.				
Antioch Dunes evening- primrose <i>Oenothera deltoides</i> ssp. <i>howellii</i>	FE/CE/1B.1	Occurs in inland dunes. 0 – 30m. Blooms March – September	<b>Absent.</b> Suitable habitat not found in the Project study area.				

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rock sanicle Sanicula saxatilis	/CR/1B.2	Occurs in rocky, scree, or talus substrate among broad-leafed upland forest, chaparral, valley, and foothill grassland. 620 – 1175m. Blooms April – May	Absent. Suitable habitat not found in the Project study area. Regional occurrences are concentrated around Mt. Diablo.
Keck's checkerbloom Sidalcea keckii	FE//1B.1	Valley grassland and foothill woodland; affinity to serpentine soil. 75 – 650m. Blooms April – May	<b>Absent.</b> Suitable habitat not found in the Project study area which is outside of understood species' range.
Two-fork clover Trifolium amoenum	FE//1B.1	Valley grassland and wetland- riparian areas. Usually occurs in wetlands, but occasionally not wetlands. 5 – 415m. Blooms April – June	<b>Low.</b> Suitable habitat is found within the Project site though Project site is outside species' known distribution. No occurrences documented within 10 miles of the Project site.
Invertebrates			
Conservancy fairy shrimp Branchinecta conservatio	FE//	Occurs in vernal pools that are relatively large and turbid, at sites that are low in alkalinity.	<b>Absent.</b> No potentially suitable habitat is found within the Project site. Species' range does not include project site. No occurrences documented within 10 miles of the Project site.
Vernal pool fairy shrimp <i>Branchinecta lynchi</i>	FT//	Brackish water habitats; shallow lagoons and lower stream reaches; still but not stagnant water with high oxygen levels.	<b>Absent.</b> No potentially suitable habitat is found within the site. No occurrences documented within 10 miles of the Project site.
San Bruno elfin butterfly Callophrys mossii bayensis	FE//	Coastal scrub and bunchgrass grassland habitats on the San Francisco penninsula, with larval foodplant, broadleaf stonecrop (Sedum spathulifolium); adults nectar on bladder parsnip (Lomatium utriculatum), common yarrow (Achillea millefolium), coast rock cress (Arabis blepharophylla), San Francisco wallflower (Erysimum franciscanum), California buttercup (Ranunculus californicus), and wood strawberry (Fragaria vesca). Known populations are restricted o San Mateo County.	Absent. Project study area is located outside of species' understood range.
Valley elderberry longhorn beetle Desmocerus californicus dimorphus	CT//	Found on or close to its host plant, red or blue elderberry (Sambucus species), along rivers and streams.	<b>Absent.</b> Host plant absent during 2007, 2008, and 2020 botanical surveys and not observed during 2017 reconnaissance survey.

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Delta green ground beetle Elaphrus viridis	CT//	Found along the margins of vernal pools within 1.5 meters of the water. Specifically, the microhabitat seems to consist of areas where the sandy mud substrate slopes gently into the water, and where there is very low-growing vegetation providing 25-100% cover. Understood range is restricted to the greater Jepson Prairie area in south-central Solano County, California.	Absent. No potentially suitable habitat for this species occurs within the Project site. The study area is located outside of species' understood range.
Vernal pool tadpole shrimp <i>Lepidurus packardi</i>	FE//	Occur in a wide variety of seasonal habitats, including vernal pools, clay flats, alkaline pools, ephemeral stock tanks, roadside ditches, and road ruts. Majority of populations occur in the Sacramento Valley.	<b>Absent.</b> No potentially suitable habitat is found within the Project site. No occurrences documented within 10 miles of the Project site.
Callippe silverspot butterfly Speyeria callippe callippe	FE//	Found in native grasslands with California golden violet ( <i>Viola pedunculata</i> ) as larval food plant.	<b>Absent.</b> Host plant absent in 2007 and 2008 botanical surveys.
California freshwater shrimp Syncaris pacifica	FE/CE/	Occur in small, perennial coastal streams. Found only in low-elevation less than 116 m (less than 380 feet) and low-gradient (generally less than 1 percent) streams.	<b>Absent.</b> Suitable habitat not present onsite. Project site is located outside of the understood species' range.
Fish			
Steelhead - central California coast DPS Oncorhynchus mykiss	FT//	Requires cold, freshwater streams with suitable gravel for spawning. Rears in rivers and tributaries to the San Francisco Bay.	<b>Low.</b> Suitable habitat not found onsite. While a remnant population still utilizes the Walnut Creek watershed, there is little record of steelhead presence within Pacheco Creek and its tributaries.
Longfin smelt Spirinchus thaleichthys	FC/CT, CSC /	Found throughout the nearshore coastal waters and open waters of San Francisco Bay-Delta including the river channels and sloughs of the Delta.	<b>Low.</b> Known to occupy Suisun Bay and adjoining tidal slough habitat. Unlikely to occur within tributary to Pacheco Creek due to a lack of suitable habitat.
Delta Smelt Hypomesus transpacificus	FT/CE/	Brackish-water channels and sloughs of the Sacramento – San Joaquin Delta.	<b>Absent.</b> Exceedingly rare within the Delta and no suitable habitat found onsite.
Amphibians			
California red-legged frog <i>Rana draytonii</i>	FT/CSC/	Lowlands and foothills in or near permanent sources of deep water with dense, shrubby or emergent riparian vegetation. Requires 11-20 weeks of permanent water for larval development. Must have access to aestivation habitat.	Moderate. Freshwater marsh and ponded perennial water of the Project site provide potential aquatic habitat for this species and adjacent grasslands provide upland refugia; however, species has not been observed on or near the site. The nearest occurrence of California red-legged frog is documented in Briones Regional Park, 5 miles south of the Project site, in two freshwater ponds surrounded by grazed annual grassland.

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California tiger salamander Ambystoma californiense	FT/CT,WL/	Vernal or temporary pools and ponds in annual grasslands, or open stages of woodlands. Adults use subterranean mammal burrows for refuge.	Low. The site does not provide suitable breeding habitat. Two occurrence records within 5 miles are from the 1920s and considered extirpated and possibly extirpated due to habitat fragmentation and urbanization of the region.
Reptiles			
Alameda whipsnake Masticophis lateralis euryxanthus	FT/CT/	Restricted to valley-foothill hardwood habitat of the coast ranges between Monterey and north San Francisco Bay. Inhabits south-facing slopes and ravines where shrubs form a vegetative mosaic with oak trees and grasses.	<b>Absent.</b> The site does not provide suitable for this species. Several occurrences documented within quadrangles located west and south of the Project site (within 5 miles).
giant garter snake Thamnophis gigas	FT/CT/	Primarily marshes and sloughs, sometimes low-gradient streams, ponds, and small lakes, with cattails, bulrushes, willows, or other emergent or water-edge vegetation usually present and used for basking and cover.	<b>Absent.</b> Marginally suitable habitat is present in the freshwater marshes of the Project site; however, study area is well outside species' known distribution.
Birds			
tricolored blackbird Agelaius tricolor	/CCE, CSC/-	Colonial nester in wetland areas of emergent vegetation; requires associated open water; most numerous in Central Valley.	Moderate. Suitable habitat for nesting is present within the marshes of the project study area. Nearest occurrence is 1 mile northwest of the project site at the Mountain View Sanitation District though is considered extirpated.
cackling goose (=Aleutian Canada goose) Branta hutchinsii leucopareia	DL/*/ (wintering)	Lakes and island prairies.	Low (no potential to nest). Marginally suitable wintering habitat is found in grassland near water within the Project site though these areas are not of sufficient size to support a migrating population for long. Species does not nest in the region.
Swainson's hawk Buteo swainsoni	/CT/	Prairie, grassland, agricultural areas. Nest in trees near agricultural fields or stands of trees along streams.	Low (unlikely to nest). Marginally suitable foraging and nesting habitat is found within the Project study area. Species range understood to be north of the Project site in less urbanized areas and east of the Project site throughout the Central Valley. Could occur in the study area on a transient basis.
bald eagle Haliaeetus Ieucocephalus	DL/CE, CFP/- -	Ocean shores, lakes, rivers. Nests in large old growth trees, typically within 1 mile of water.	Low (unlikely to nest). Could occur over the project study area in flight and on a transient basis through the project site does not provide suitable nesting or foraging habitat for this species.
California black rail Laterallus jamaicensis coturniculus	BCC/CT, CFP/	Inhabits freshwater marshes, wet meadows and shallow margins of saltwater marshes bordering larger bays. Needs water depths of about 1 inch that does not fluctuate during the year and dense vegetation for nesting habitat.	Moderate (unlikely to nest). Limited suitable habitat is present within the marshes of the project site. Generally more affiliated with coastal salt marshes. Nearest occurrences are documented 1 mile north of the project site within brackish marshes bordering Carquinez Strait and in brackish marsh vegetation

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Ridgway's rail (=California clapper) Rallus longirostris obsoletus	FE/CE, CFP/- -	Salt-water and brackish marshes traversed by tidal sloughs in the vicinity of San Francisco Bay. Associated with abundant growths of pickleweed, but feeds away from cover on invertebrates from mud-bottomed sloughs.	Low (unlikely to nest). Limited suitable habitat is present within the brackish marsh of the Project site. A small, widely distributed population known to occur in Suisun Marsh and several occurrences are documented within 0.5 miles of the project site within the coastal salt marshes along the south border of Suisun Bay.
California least tern Sternula antillarum browni	FE/CE, CFP/- -	Nests along the coast from San Francisco Bay south to northern Baja California. Colonial breeder on bare or sparsely vegetated, flat substrates: sand beaches, alkali flats, landfills, or paved areas.	<b>Low (unlikely to nest).</b> May occur over the project area in flight on a transient basis. No nesting colonies documented within 5 miles of the project site.
Mammals			
salt-marsh harvest mouse <i>Reithrodontomys</i> <i>raviventris</i>	FE/CE, CFP/- -	Only in the saline emergent wetlands of San Francisco Bay estuary and its tributaries. Found primarily in pickleweed ( <i>Salicornia</i> spp.). Does not burrow, builds loosely organized nests. Requires higher areas for flood escape.	Low-Moderate. Limited suitable habitat is present within the brackish marsh of the project site. Several occurrences documented 1 mile north of the project site are located in brackish water marshes bordering Carquinez Strait. Unlikely this species would travel to brackish marsh habitat within the Project site from more abundant and continuous habitat on the south border of Suisun Bay.
San Joaquin kit fox Vulpes macrotis mutica	FE/CT/	Undeveloped grasslands and agricultural land.	<b>Low.</b> Project study area is located outside of the species understood range.

#### Other Special-Status Species

		Other Special-Status Sp	ccies
Plants		·	
bent-flowered fiddleneck <i>Amsinckia lunaris</i>	//1B.2	Cismontane woodland, valley and foothill grassland. 50-500 m. Blooms March – June	<b>Low.</b> Marginally suitable habitat found within woodland of the Hill though not observed during appropriately-timed 2007 rare plant survey. Single occurrence within 5 miles is located in Briones Regional Park, 5 miles southwest of the Project site.
California androsace Androsace elongata ssp. acuta	//4.2	Chaparral, foothill woodland, pinyon and juniper woodland, northern coastal scrub, meadows and seeps, valley and foothill grassland, and coastal sage scrub. Often found on slopes. 50 – 2120m.  Blooms March – June	<b>Low.</b> Marginally suitable habitat found within woodland and grassland of the Hill though not observed during appropriately timed 2007 rare plant survey.
slender sliver moss Anomobryum julaceum	//4.2	Occurs in broadleafed upland forest, lower montane coniferous forest and North Coast coniferous forest. 100-1000 m.	<b>Absent.</b> Suitable habitat is not found in the Project study area.
coast rockress Arabis blepharophylla	//4.3	Rocky areas in broadleafed upland forest, coastal bluff scrub, coastal prairie, coastal scrub. 3 – 1100m. Blooms February – May	<b>Absent.</b> Suitable habitat is not found in the Project study area. No occurrences documented within 5 miles of the Project site.
Mt. Diablo manzanita Arctostaphylos auriculata	//1B.3	Occurs in chaparral (sandstone) and cismontane woodland. 135- 650 m. Blooms January – March	<b>Absent.</b> Suitable habitat not found onsite. Project study area is outside species' known distribution. Not observed during 2007 and 2008 rare plant surveys.

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Contra Costa manzanita Arctostaphylos manzanita ssp. laevigata	//1B.2	Occurs in chaparral (rocky). 430-1100 m. Blooms January – March	<b>Absent.</b> Suitable habitat not found in the Project study area. Not observed during 2007 and 2008 rare plant surveys.
alkali milk-vetch Astragalus tener var. tener	//1B.2	Alkali playa and flats, valley, annual, and foothill grassland, vernal pools, low ground, and flooded lands. 1-170 m. Blooms March – June	Low. Marginally suitable habitat is found within the alkali meadow community of the Project site. Species was absent during appropriately timed rare plant surveys conducted in 2008. No documented occurrences within 10 miles of the Project site.
heartscale Atriplex cordulata var. cordulata	//1B.2	Occurs in chenopod scrub, meadows and seeps, valley and foothill grassland (sandy). 0-560 m. Blooms April – October	<b>Absent.</b> Suitable habitat not found in the Project study area. No occurrences documented within 5 miles of the Project site.
crownscale Atriplex coronata var. coronata	//4.2	Occurs in chenopod scrub, valley and foothill grassland, vernal pools.1-590 m. Blooms March – October	Low. Marginally suitable habitat found within woodland and grassland of the hill and within the alkali meadow community though not observed during appropriately- timed 2007 rare plant survey.
brittlescale Atriplex depressa	//1B.2	Occurs in chenopod scrub, meadows and seeps, playas, valley and foothill grassland, and vernal pools. 1-320 m. Blooms April – October	<b>Low.</b> Marginally suitable habitat not found in the Project study area. No occurrences documented within 5 miles of the Project site.
vernal pool smallscale Atriplex persistens	//1B.2	Occurs in vernal pools (alkaline). 10-115 m. Blooms June – October	<b>Absent.</b> Suitable habitat not found in the Project study area. No occurrences documented within 5 miles of the Project site.
big-scale balsamroot Balsamorhiza macrolepis	//1B.2	Occurs in chaparral, cismontane woodland, valley and foothill grassland. 90-1555 m. Blooms March – June	<b>Absent.</b> Suitable habitat not found in the Project study area. No occurrences documented within 5 miles of the Project site.
big tarplant Blepharizonia plumosa	//1B.1	Occurs in valley and foothill grassland. 30-505 m. Blooms July – October	Low. Suitable habitat found within woodland and grassland of the hill though not observed during appropriately timed 2007 rare plant survey. Nearest occurrence documented 5 miles northwest of the Project site in Benicia is historical and considered possibly extirpated.
Brewer's calandrinia Calandrinia breweri	//4.2	Chaparral, northern coastal scrub and coastal sage scrub in disturbed habitat. 10 – 1220m. Blooms March – June	<b>Absent.</b> Suitable habitat not found in the Project study area. No occurrences documented within 5 miles of the Project site.
round-leaved filaree California macrophylla	//1B.1	Cismontane woodland, valley and foothill grassland. Clay soils. 15-1,200 m. Blooms March – May	<b>Low.</b> Marginally suitable habitat found within woodland and grassland of the hill though not observed during appropriately timed 2007 rare plant survey.
Mt. Diablo fairy lantern Calochortus pulchellus	//1B.2	Occurs in chaparral, cismontane woodland, riparian woodland, valley and foothill grassland. 30-840 m. Blooms April – June	<b>Low.</b> Marginally suitable habitat found within woodland and grassland of the hill though not observed during appropriately timed 2007 rare plant survey.

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Oakland star-tulip Calochortus umbellatus	//4.2	Chaparral, valley grassland, yellow pine forest and mixed evergreen forest. Has an affinity to serpentine soils. 100–700m.	<b>Low.</b> Marginally suitable habitat found within woodland and grassland of the hill though not observed during appropriately timed 2007 rare plant survey.
		Blooms March – May	
chaparral harebell Campanula exigua	//1B.2	Occurs in chaparral in rocky, usually serpentinite substrate. 275–1250 m. Blooms May – June	<b>Absent.</b> Suitable habitat is not found in the Project study area. No occurrences documented within 5 miles of the Project site.
johnny-nip Castilleja ambigua var. ambigua	//4.2	Coastal bluff scrub, coastal prairie, coastal scrub, marshes and swamps, valley and foothill grassland, and margins of vernal pools. 0–435m. Blooms March – August	<b>Low.</b> Marginally suitable habitat is found in the Project study area. Occurrences within 5 miles are historical and located in the Martinez area.
holly-leafed ceanothus Ceanothus purpureus	//1B.2	Chaparral and cismontane woodland. 120-640 m. Blooms February – June	<b>Absent.</b> Suitable habitat not found in the Project study area. No occurrences documented within 5 miles of the Project site.
Congdon's tarplant Centromadia parryi ssp. cogdonii	//1B.1	Valley and foothill grasslands/alkaline habitats, low water tolerance. 0–260m. Blooms May – October, uncommon in November	Moderate. Suitable habitat is found within the alkali meadow community and grasslands of the Project site near the brackish marsh associated with Pacheco Creek. Species documented on the property in 2005 but was not found during appropriately timed rare plant surveys conducted in 2007.
papoose tarplant Centromadia parryi ssp. parryi	//1B.2	Chaparral, coastal prairie, meadows and seeps, marshes and swamps (coastal salt), valley and foothill grassland (vernally mesic). 0-420 m. Blooms May – November	<b>Low.</b> Marginally suitable habitat is found in the Project study area. No occurrences documented within 5 miles of the Project site.
Parry's rough tarplant Centromadia parri ssp. rudis	//4.2	Valley and foothill grassland, vernal pools. 0-100 m. Blooms May – October	<b>Low.</b> Marginally suitable habitat is found in the Project study area. No occurrences documented within 5 miles of the Project site.
hispid salty bird's-beak Chloropyron molle ssp. hispidum	//1B.1	Meadows and seeps, playas, valley and foothill grassland. 1 - 155 m. Blooms June – September	<b>Low.</b> Marginally suitable habitat is found in the Project study area. No occurrences documented within 5 miles of the Project site.
Bolander's water- hemlock Cicuta maculata var. bolanderi	//2B.1	Marshes and swamps, coastal, fresh or brackish water. 0-200 m. Blooms July – September	<b>Moderate.</b> Suitable habitat is found in the marshes in the Project site. Occurrences documented within 5 miles of the Project site are historical.
Franciscan thistle Cirsium andrewsii	//1B.2	Mixed evergreen forest, northern coastal scrub, coastal prairie, and wetland, riparian areas along the coast. Affinity to serpentine soil. 13 – 1950 m. Blooms March – July	<b>Low.</b> Marginally suitable habitat is found in the Project study area. No occurrences documented within 5 miles of the Project site.
serpentine collomia Collomia diversifolia	//4.3	Chaparral, cismontane woodland. 200-600 m. Blooms May – June	<b>Absent.</b> Suitable habitat not found in the Project stud area.

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Hospital Canyon larkspur Delphinium californicum ssp. interius	//1B.2	Chaparral (openings), cismontane woodland (mesic), coastal scrub. 195-1095 m. Blooms April – June	<b>Absent.</b> Marginally suitable habitat found within woodland of the hill though not observed during appropriately timed 2007 rare plant survey. Site is below known elevation range.
western leatherwood Dirca occidentalis	//1B.2	Broadleaf upland forest, chaparral, closed-cone coniferous forest, cismontane woodland, north coast coniferous forest, riparian for and woodland. on brushy slopes, mesic sites; mostly in mixed evergreen and foothill woodland communities. 30-550 m. Blooms January – March (April)	<b>Absent</b> . Suitable habitat not found in the Project study area. Single occurrence within 5 miles is located on the north side of Carquinez Straight.
dwarf downingia Downingia pusilla	//2B.2	Valley and foothill grassland (mesic), vernal pools. 1-445 m. Blooms March – May	<b>Low.</b> Marginally suitable habitat is found within the grasslands of the Project site. No occurrences documented within 5 miles of the Project site.
small spikerush Eleocharis parvula	//4.3	Marshes and swamps. 1-3020 m. Blooms June – August	<b>Moderate.</b> Suitable habitat found within marshes of the Project study area though not observed during appropriately timed 2007 rare plant survey.\
Lime Ridge Eriastrum <i>Eriastrum erttera</i> e	//1B.2	Chaparral (openings or edges). 200-290 m. Blooms June – July	<b>Absent.</b> Suitable habitat not found in the Project study area.
Mt. Diablo buckwheat Eriogonum truncatum	//1B.1	Chaparral, coastal scrub, valley and foothill grassland. 3-350 m. Blooms April – September (November – December)	<b>Low.</b> Marginally suitable habitat found within woodland and grassland of the hill though not observed during appropriately timed 2007 rare plant survey.
Jepson's wooly sunflower <i>Eriophyllum jepsonii</i>	//4.3	Chaparral, cismontane woodland, coastal scrub. 200- 1025 m. Blooms April – June	<b>Absent.</b> Suitable habitat not found in the Project study area.
Jepson's coyote thistle Eryngium jepsonii	//1B.2	Valley and foothill grasslands and vernal pools. 6 – 110m. Blooms April – August	<b>Low.</b> Marginally suitable habitat found within grassland of the Project site. Single occurrence within 5 miles is located 4 miles east of the Project site on the Carquinez Loop trail southwest of Martinez.
San Joaquin spearscale Extriplex joaquinana	//1B.2	Chenopod scrub, meadows and seeps, playas, valley and foothill grassland. 1-835 m. Blooms April – October	Low. Marginally suitable habitat found within grassland of the Project site. Nearest occurrence documented within the Golden Eagle refinery in grassland above brackish marsh habitat. Not observed during appropriately timed 2007 rare plant survey.
minute pocket moss Fissidens pauperculus	//1B.2	North coast coniferous forest with damp coastal soils. 10 – 1024m. Year-round	<b>Absent.</b> Suitable habitat not found in the Project study area.
Fragrant fritillary <i>Fritillaria liliacea</i>	//1B.2	Coastal scrub, valley and foothill grassland, coastal prairie. Often on serpentine; usually on clay soils, in grassland. 3-410 m. Blooms February – April	Moderate. Suitable habitat is found within grasslands of the Project site. Species was absent during appropriately timed rare plant surveys conducted in 2008. Two occurrences are documented 10 miles southeast of the Project site on Shell Ridge within Walnut Creek Open Space.
Toren's grimmia <i>Grimmia torenii</i>	//1B.3	Chaparral, cismontane woodland and lower montane coniferous forest in openings of rocky areas, boulders, and on rock walls.	<b>Absent.</b> Suitable habitat not found in the Project study area.

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Diablo helianthella Helianthella castanea	//1B.2	Broadleaved upland forest, chaparral, cismontane woodland, coastal scrub, riparian woodland, valley and foothill grassland. Usually in chaparral/oak woodland interface in rocky, azonal soils. Often in partial shade. 25-1,150 m. Blooms March – June	<b>Low.</b> Marginally suitable habitat found within woodland and grassland of the hill though not observed during appropriately timed 2007 rare plant survey.
Brewer's western flax Hesperolinon breweri	//1B.2	Chaparral, cismontane woodland, valley and foothill grassland. 30-945 m. Blooms May – July	<b>Absent</b> . Suitable habitat not found in the Project study area.
coast iris Iris longipetala	//4.2	Coastal prairie, lower montane coniferous forest, meadows and seeps, mesic sites. 5 – 430m. Blooms March – May	<b>Low.</b> Marginally suitable habitat found within woodland and grassland of the study area. Not documented within 5 miles of the Project site.
Carquinez goldenbush Isocoma arguta	//1B.1	Valley and foothill grassland (alkaline). 1-20 m. Blooms August – December	<b>Low.</b> Marginally suitable habitat found within woodland and grassland of the hill though not observed during appropriately timed 2007 rare plant survey.
southern California black walnut Juglans californica	//4.2	Chaparral, cismontane woodland, coastal scrub, riparian woodland. 50-900 m. Blooms March – August	<b>Absent.</b> Suitable habitat not found in the Project study area. Not observed during 2007 and 2008 rare plant surveys.
Ferris' goldfields Lasthenia ferrisiae	//4.2	Vernal pools (alkaline, clay). 20- 700 m. Blooms February – May	<b>Low.</b> Marginally suitable habitat found within alkali meadow community though not observed during appropriately timed 2007 rare plant survey.
delta tule pea Lathyrus jepsonii var. jepsonii	//1B.2	Freshwater and brackish marshes. 0-530 m. Blooms May – July	<b>Moderate.</b> Suitable habitat found within freshwater marsh of the Project site though not observed during appropriately timed 2007 rare plant survey. Nearest occurrence documented within 1 mile of the Project site at the Waterbird Regional Preserve.
legenere Legenere limosa	//1B.1	Vernal pools. Found in beds of vernal pools. 1-880m. Blooms April – June	<b>Absent.</b> Suitable habitat not found in the Project study area. No occurrences documented within 5 miles of the Project site.
wooly-headed lessingia Lessingia hololeuca	//3	Valley grassland, yellow pine forest and northern coastal scrub. Has an affinity to serpentine soils. 15 – 305m. Blooms June – October	<b>Low.</b> Marginally suitable habitat found in the Project site. No occurrences documented within 5 miles of the Project site.
Delta mudwort Limosella australis	//2B.1	Marshes and swamps (freshwater or brackish), and riparian scrub. 0-3 m. Blooms May – July (August – September)	<b>Moderate.</b> Suitable habitat found in the Project site. Occurrences within 5 miles of the Project site concentrated on the margins of Suisun Bay.
showy golden madia <i>Madia radiata</i>	//1B.1	Cismontane woodland and valley and foothill grassland. 25-1215 m. Blooms March – May	<b>Low.</b> Marginally suitable habitat found in the Project site. No occurrences documented within 5 miles of the Project site.
Hall's bush-mallow <i>Malacothamnus hallii</i>	//1B.2	Chaparral and coastal scrub. 10-760 m. Blooms (April) May – September (Oct)	<b>Absent.</b> Suitable habitat not found in the Project study area. Not observed during appropriately timed 2007 rare plant survey.

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Oregon meconella Meconella oregana	//1B.1	Coastal prairie and coastal scrub. 250-620 m. Blooms March – April	Low. Marginally suitable habitat found within grassland of the Project study area though not observed during appropriately timed 2007 rare plant survey. Regional occurrences concentrated along the Berkeley and Oakland hills ridgeline.
Mt. Diablo cottonweed Micropus amphibolus	//3.2	Rocky areas within valley grassland, foothill woodlands and mixed evergreen forest. Has an affinity to serpentine soils. 45 – 825m. Blooms March – May	<b>Absent.</b> Suitable habitat not found in the Project study area. Not observed during appropriately timed 2007
march microseris <i>Microseris paludosa</i>	//1B.2	Closed-cone coniferous forest, cismontane woodland, coastal scrub, and valley and foothill grassland. 5 – 355m. Blooms April – June	<b>Low.</b> Marginally suitable habitat found in the Project site. No occurrences documented within 10 miles of the Project site.
San Antonio Hills monardella <i>Monardella antonina</i> ssp. <i>antonina</i>	//3	Chaparral and cismontane woodland. 320-1000 m. Blooms June – August	<b>Absent.</b> Suitable habitat not found in the Project study area.
woodland woolythreads Monolopia gracilens	//1B.2	Mixed evergreen forest, broadleaved upland forest, redwood forest, and chaparral, and valley and foothill grasslands. Affinity to serpentine soil. 60 – 1360m. Blooms March – July	<b>Low.</b> Marginally suitable habitat found in the Project site. No occurrences documented within 10 miles of the Project site.
little mousetail Myosurus minimus ssp. apus	//3.1	Valley and foothill grassland, and vernal pools (alkaline). 20- 640 m. Blooms March – June	<b>Absent.</b> Suitable habitat not found in the Project site. No occurrences documented within 10 miles of the Project site.
Lime Ridge Navarretia Navarretia gowenii	//1B.1	Occurs in chaparral. 180-305 m. Blooms May – June	<b>Absent.</b> Suitable habitat not found in the Project study area.
Baker's navarretia Navarretia Ieucocephala ssp. bakeri	//1B.1	Cismontane woodland, lower montane coniferous forest, meadows and seeps, valley and foothill grassland, and vernal pools. 5-1740 m. Blooms April – July	<b>Low.</b> Marginally suitable habitat found in the Project site. No occurrences documented within 10 miles of the Project site.
Mt. Diablo phacelia  Phacelia phacelioides	//1B.2	Rocky areas within chaparral and cismontane woodland. 500- 1370 m. Blooms April – May	<b>Absent.</b> Suitable habitat not found in the Project study area. Not observed during appropriately timed 2007
bearded popcornflower Plagiobothrys hystriculus	//1B.1	Valley and foothill grassland (mesic) and vernal pools margins. 0-274 m. Blooms April – May	<b>Low.</b> Marginally suitable habitat found in the Project site. No occurrences documented within 5 miles of the Project site.

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Marin knotweed Polygonum marinense	//3.1	Coastal salt or brackish marsh and coastal wetland and riparian areas. 0-10 m. Blooms May – August	<b>Low.</b> Marginally suitable habitat is found in brackish marsh of the Project site though few occurrences within 5 miles located on the north side of Suisun Bay in Benicia State Park.	
California alkaline grass Puccinellia simplex	//1B.2	Chenopod scrub, meadows and seeps, valley and foothill grassland, and vernal pools. Blooms March – May	<b>Low.</b> Marginally suitable habitat found in the Project site. No occurrences documented within 10 miles of the Project site.	
Lobb's aquatic buttercup <i>Ranunculus lobbii</i>	//4.2	Valley grassland, foothill woodland, redwood forest, freshwater wetlands, wetlandriparian areas and vernal pools. Occurs almost always under natural conditions in wetlands. 12 – 810m. Blooms February – May	<b>Low.</b> Marginally suitable habitat found within grassland, alkali meadow, and freshwater marsh communities though not found during appropriately timed 2007 rare plant survey.	
chaparral ragwort Senecio aphanactis	//2B.2	Chaparral, cismontane woodland, and coastal scrub. Sometimes alkaline. 15 – 800m. Blooms January – April	<b>Low.</b> Marginally suitable habitat found within woodland of the hill though not observed during appropriately- timed 2007 rare plant survey.	
long-styled sand- spurrey Spergularia macrotheca var. longistyla	//1B.2	Meadows and seeps, and marshes and swamps. 0-255 m. Blooms February – May	<b>Low.</b> Marginally suitable habitat is found in freshwater marsh of the Project site. No occurrences documented within 5 miles of the Project site.	
most beautiful jewel flower Streptanthus albidus ssp. peramoenus	//1B.2	Chaparral, cismontane woodland, and valley and foothill grassland. Affinity for serpentine soils. 95-1000 m. Blooms April – September	<b>Absent.</b> Suitable habitat not found in the Project study area. No occurrences documented within 5 miles of the Project site.	
Mt. Diablo jewelflower Streptanthus hispidus	//1B.3	Rocky areas within chaparral and valley and foothill grassland. 365-1200 m. Blooms March – June	<b>Absent.</b> Suitable habitat not found in the Project study area. Not observed during appropriately timed 2007	
slender-leaved pondweed Stuckenia filiformis ssp. alpina	//2B.2	Marshes and swamps, in shallow, clear water of lakes and drainage channels. 15 – 2310m. Blooms May – July	<b>Low.</b> Marginally suitable habitat is found in freshwater marsh of the Project site. No occurrences documented within 5 miles of the Project site.	
Suisun Marsh aster Symphyotrichum Ientum	//1B.2	Freshwater wetlands and marshes and brackish marshes. 0-3 m. Blooms May – November	<b>Low.</b> Suitable habitat found within freshwater marsh of the Project site though not observed during appropriately timed 2007 rare plant survey.	
saline clover Trifolium depauperatum var. hydrophilum	//1B.2	Marshes and swamps, valley and foothill grassland, vernal pools. Mesic, alkaline sites. 0- 300 m. Blooms April – June	<b>Low.</b> Marginally suitable habitat is found in freshwater marsh of the Project site. Single occurrences documented within 5 miles of the Project site is from 1928 and lacks description.	
coastal triquetrella  Triquetrella californica	//1B.2	On soil in coastal bluff and coastal scrub. 10-100 m.	<b>Absent.</b> Suitable habitat not found in the Project study area.	

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caper-fruited tropidocarpum <i>Tropidocarpum</i> <i>capparideum</i>	//1B.1	Valley and foothill grassland (alkaline hills). 1-455 m. Blooms March – April	<b>Low.</b> Marginally suitable habitat found within woodland and grassland of the Hill though not observed during appropriately timed 2007 rare plant survey.
oval-leaved viburnum Viburnum ellipticum	//2B.3	Chaparral, cismontane woodland, and lower montane coniferous forest. 215-1400 m. Blooms May – June	<b>Absent.</b> Suitable habitat not found in the Project study area.
Invertebrates	•		
Monarch butterfly Danaus plexippus	/*/ (wintering sites)	Winter roost sites extend along the coast from northern Mendocino to Baja California, Mexico. Roosts located in wind-protected tree groves (eucalyptus, Monterey pine, cypress), with nectar and water sources nearby.	<b>Low.</b> Individuals may occur in the Project study area during migration though no established wintering ground are documented within 5 miles.
Bridges' coast range shoulderband Helminthoglypta nickliniana bridgesi	/*	Inhabits open hillsides of Alameda and Contra Costa counties. Tends to colonize under tall grasses and weeds.	<b>Moderate.</b> Suitable habitat is found on annual grassland of the hill within the Project site. Single occurrence within 5 miles is documented 0.5 mile southwest of the Project site.
Fish			
Sacramento perch Archoplites interruptus	/CSC	Historically found in the sloughs, slow-moving rivers, and lakes of the Central Valley. Prefers warm water. Aquatic vegetation is essential for young. Tolerates wide range of water conditions.	Absent. Not expected to occur in project area waters.
Sacramento splittail Pogonichthys macrolepidotus	/CSC/	Range centers on the San Francisco Estuary and spawning occurs in flooded vegetation.	Low. Primarily confined to the Delta, Suisun Bay, Suisun Marsh and the lower Napa River. Marginally suitable habitat is present in Pacheco Creek, though occurrence is unlikely at such a distance from Suisun Bay.
California roach Lavinia symmetricus symmetricus	/CSC/	Inhabit small, often intermittent streams. Tolerate a wide range of temperature and dissolved oxygen levels.	<b>Low.</b> Historically abundant within the Walnut Creek watershed. Potentially present within the Pacheco Creek as roach can tolerate a wider range of habitat conditions than other native species.
Sacramento hitch Lavinia exilicauda exilicauda	/CSC/	Inhabit warm, lowland waters, and clear streams. Prefer shallow stream habitat with smaller gravel and mud substrates.	<b>Low.</b> Historically abundant within the Walnut Creek watershed. Often overlaps in distribution with California roach, as they share similar habitat requirements, and may be present within Pacheco Creek.
Pacific lamprey Entosphenus tridentatus	/CSC/	Requires cool, freshwater streams with suitable gravel for spawning. Rears in rivers and tributaries to San Francisco Bay.	<b>Low.</b> Known to occur within the upper reaches of Walnut Creek. This species' status is poorly documented, and its relative abundance in streams is unknown.

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Chinook salmon – Fall/Late-fall ESU Oncorhynchus tshawytscha	/CSC/	Requires cold, freshwater streams with suitable gravel for spawning. More common in Central Valley streams, occasionally rears in tributaries to San Francisco Bay.	<b>Low.</b> Known to occur within lower Walnut Creek, however, there is a lack of suitable habitat within the Project site.	
Reptiles				
northern California legless lizard Anniella pulchra	/CSC/	Burrows in loose soil, especially in semi-stabilized sand dunes and in other areas with sandy soil, including habitats vegetated with oak or pine-oak woodland, or chaparral. Sometimes found under leaf litter beneath trees or other surface objects such as driftwood and logs.	es exposed soils of the hill within the Project site. Single occurrence within 10 miles is located 9 miles southwest of the Project site in Lafayette and is considered possibly extirpated.	
Western pond turtle Actinemys marmorata	/CSC/	Aquatic turtle of ponds, marshes, rivers, streams and irrigation ditches with aquatic vegetation. Needs basking sites and suitable (sandy banks or grassy open fields) upland habitat for egg-laying.	<b>Moderate.</b> Suitable habitat is found in the tributary to Pacheco Creek and perennial pond of the Project site. Documented in Pacheco Creek within 0.5 mile of the Project site. Several other occurrences documented within 5 miles.	
coast horned lizard Phrynosoma blainvillii	/CSC/	Occurs in valley-foothill hardwood, conifer and riparian habitats, as well as in pine- cypress, juniper and annual grassland habitats.	Low. Marginally suitable habitat is found in the foothill grassland and woodland of the Project site. Single occurrence within 10 miles is documented 9 miles south of the Project site west of Zion Peak in Clayton in open chaparral habitat. Study area is on western edge of understood species' range.	
Birds				
Cooper's hawk Accipiter cooperi	/CDFW WL&3503.5	Woodland, chiefly of open, interrupted or marginal type. Nest sites are mainly in riparian growths of deciduous trees but also relatively common in urban areas.	<b>Present (unlikely to nest). Present</b> Species prefers more densely wooded habitats for nesting and foraging that found in the study area.	
Great egret <i>Ardea alba</i>	/* (rookery site)	Nest colonially in groves of trees. Rookery sites located near marshes, tide-flats, irrigated pastures, and margins of rivers and lakes.	Present (unlikely to nest). Suitable foraging habitat is present in the freshwater marsh and drainage channel to Pacheco Creek. Observed in the site during 2020 surveys. No established rookeries documented in the study area for nesting.	
great blue heron Ardea herodias	/* (rookery site)	Colonial nester in tall trees, cliff sides, and sequestered spots on marshes. Rookery sites in close proximity to foraging areas: marshes, lake margins, tide-flats, rivers and streams, wet meadows.	Present (unlikely to nest). Suitable foraging habitat is present in the freshwater marshes in the site. Observed in the pond during 2020 surveys. No established rookeries documented in the study area for nesting.	
short-eared owl Asio flammeus	/CSC	Found in swamp lands, both fresh and salt; lowland meadows; irrigated alfalfa fields.	Low (unlikely to nest). Limited suitable habitat for this species is found within the project study area. Nearest occurrence documented 10 miles northeast of the project site at Grizzly Island Wildlife Area. May occur over the project site on a transient basis.	

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burrowing owl Athene cunicularia	/CSC	Open, dry annual or perennial grasslands, deserts and scrublands characterized by low-growing vegetation. Subterranean nester, dependent upon burrowing mammals, most notably, the California ground squirrel.	Low (unlikely to nest). Marginally suitable habitat is present in the study area. Flat areas of annual grasslands within the Project site have been disked and no ground squirrel burrows were observed in this area. Two occurrences documented within 5 miles of the Project site are 1.5 miles southeast at the Buchannan Airfield and 5 miles northeast at Military Ocean Terminal Concord.
golden eagle Aquila chrysaetos	/CFP	Rolling foothills, mountain areas, sage-juniper flats, and desert. Cliff-walled canyons and large trees in open areas provide nesting habitat.	Low (unlikely to nest). Marginally suitable annual grassland and foothill habitat is found in the Project study area however is generally not of sufficient size to attract foraging or nesting eagles.
great horned owl Bubo virginianus	//3503.5		<b>Moderate (potential to nest).</b> Species is ubiquitous throughout the region. May forage over study area grasslands and nest in mature trees on the Hill.
Red-tailed hawk <i>Buteo jamaicensis</i>	//3503.5	Usually nests in large trees, often in woodland or riparian deciduous habitats. Also known to nest in urban parks and neighborhoods. Forages over open grasslands and scrublands.	<b>Moderate (potential to nest).</b> Species is ubiquitous throughout the region. May forage over study area grasslands and nest in mature trees on the Hill.
northern harrier Circus cyaneus	/CSC/	Coastal salt and fresh-water marsh. Nests and forages in grasslands. Nests on ground in shrubby vegetation, usually at marsh edge; nest built of a large mound of sticks in wet areas.	<b>Moderate (potential to nest).</b> Suitable foraging and nesting habitat is found within the study area grasslands and marsh habitats.
yellow rail Coturnicops noveboracensis	/CSC/	Occurs in densely vegetated marshes. Require sedge marshes/meadows with moist soil or shallow standing water for breeding.	Low (no potential to nest). Suitable habitat is found in the marshes in the Project site. Uncommon to the region; study area is outside of the species' understood range.
White-tailed kite Elanus leucurus	/CFP/	Rolling foothills and valley margins with scattered oaks and river bottomlands or marshes next to deciduous woodland. Open grasslands, meadows, or marshes for foraging close to isolated, dense-topped trees for nesting and perching.	Moderate (potential to nest). Suitable nesting habitat is present in the study area. Suitable foraging habitat is found throughout annual grassland of the study area.
American peregrine falcon Falco peregrinus anatum	DL/DL, CFP/	Woodlands, coastal habitats, riparian areas, coastal and inland waters, human made structures that may be used as nest or temporary perch sites.	Low (unlikely to nest). Could occur over the project study area in flight and on a transient basis through the project site does not provide suitable nesting or foraging habitat for this species.
American kestrel Falco sparverius	/3503.5	Frequents generally open grasslands, pastures, and fields; primarily a cavity nester in large trees near open areas.	<b>Moderate (potential to nest).</b> Species is ubiquitous throughout the region. May forage over study area grasslands and nest in mature trees on the site.

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Saltmarsh common yellowthroat Geothlypis trichas sinuosa	BCC/CSC/	Resident of the San Francisco Bay region, in fresh and salt water marshes. Requires thick, continuous cover down to water surface for foraging; tall grasses, tule patches, willows for nesting.	Low (unlikely to nest). Species generally prefers dense riparian willow thickets for nesting. May occur throughout the marsh vegetation in the study area on a transient basis. Several occurrences documented in the salt marshes along the southern border of Suisun Bay.
Suisun song sparrow Melospiza melodia maxillaris	BCC/CSC/	Resident of salt marshes bordering Suisun Bay from Martinez eastward along the south bayshore to Pittsburg, and within the Suisun marshlands north of the Bay. Inhabits pickleweed marshes; nests low in <i>Grindelia</i> (high enough to escape high tides) and in pickleweed. Will also forage in non-tidal seasonal wetlands, riparian areas, and drainages.	Moderate (unlikely to nest). Suitable foraging and nesting habitat is present within the marshes of the project site. Nearest occurrences are documented 1 mile north of the project site in coastal saltmarshes which border Suisun Bay.
San Pablo song sparrow <i>Melospiza melodia</i> samuelis	BCC/CSC/	Resident of salt marshes bordering San Pablo Bay. Inhabits pickleweed marshes; nests low in <i>Grindelia</i> bushes (high enough to escape high tides) and in pickleweed.	Low (unlikely to nest). Suitable habitat is present within brackish marsh in the project site though the project site is outside of the species known range (salt marshes of San Pablo Bay). Nearest occurrence is documented 10 miles northwest of the project study area at the boundary of San Pablo and Suisun Bay. May occur on a transient basis during
Osprey Pandion haliaetus	/WL/	Habitat varies greatly and usually includes adequate supply of accessible fish, shallow waters, open and elevated nest sites (10-60 feet in height), and artificial structures such as towers. Builds large platform stick nests near or in open waters.	Low (unlikely to nest). Suitable nesting habitat for this species is not present within the project study area. May occur over the project site while in transit to Suisun Bay.
Mammals			
Pallid bat Antrozous pallidus	/CSC/ WBWG-H	Deserts, grasslands, shrublands, woodlands and forests. Most common in open, dry habitats with rocky areas for roosting. Day roots in caves, crevices, mines, and hollow trees and buildings. Night roosts can occur in more open areas, like porches and open buildings. Roosts must protect bats from high temperatures. Very sensitive to disturbance of roosting sites.	Low. Suitable roost sites not found within the project study area. Species may forage over freshwater marsh and annual grassland of the project site. Nearest occurrences documented more than 5 miles south of the projects site.
Townsend's big-eared bat Corynorhinus townsendii	/CSC/ WBWG-H	Inhabits caves and mines, but may also use bridges, buildings, rock crevices and tree hollows in coastal lowlands, cultivated valleys and nearby hills characterized by mixed vegetation throughout California below 3,300 meters. Very sensitive to human disturbance.	<b>Moderate.</b> Limited roost habitat is found within trees on the hill within the project site. Species may forage over freshwater marsh and annual grassland of the project site. Nearest occurrence documented 7 miles south of the project site.

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Berkeley kangaroo rat Dipodomys heermanni berkeleyensis	/CSC/	Occurs in open, grassy hilltops and open spaces in chaparral and blue oak/digger pine woodlands with thin soils.	<b>Low.</b> Suitable shrub and scrub habitat is not found within the project study area which is outside of the understood species' range.
western red bat Lasiurus blossevillii	/CSC/ WBWG-H	Roosting sites are found in the foliage of trees and shrubs in forests, predominantly in edge habitats adjacent to streams and open fields. Feeds over a wide variety of habitats including grasslands, shrublands, open woodlands and forests, and croplands.	Moderate. Suitable foraging and roosting habitat is present within the trees on the hill, annual grassland, and emergent freshwater marsh of the study area. No occurrences documented within 5 miles of the Project site.
Hoary bat Lasiurus cinereus	/*/WBWG-M	Highly associated with forests of the western U.S. Prefers to roost on clearing edges in dense foliage of medium to large deciduous or coniferous trees. Feeds primarily on moths and will forage in open areas or habitat edges.	<b>Moderate.</b> May roost in trees onsite, particularly during migration periods in spring and fall. Two occurrences documented 5 miles southeast of the Project site within urbanized area of Concord.
San Francisco dusky- footed woodrat Neotoma fuscipes annectens	/CSC/	Forests with moderate canopy cover and brushy understory.	<b>Low.</b> Woodland on the hill site lacks shrub habitat suitable for this species. No middens observed during 2017 reconnaissance survey.
big free-tailed bat Nyctinomops macrotis	/CSC/ WBWG-M	Low-lying arid areas in southern California. Prefers high cliffs or rocky outcrops for roost sites though will use structures or tree hollows. Feeds principally on large moths.	Low. Limited roost habitat found within trees on the hill of the project site. May forage over annual grasslands and emergent freshwater marsh of the project site. Nearest occurrence is documented 3.5 miles west of the project site in the vicinity of Martinez.
San Joaquin pocket mouse Perognathus inoratus	/*/	Dry, open grasslands or scrub communities with fine-textured (sandy) soils in the central and Salinas valleys. 350-600m	<b>Low.</b> Suitable habitat is present within the project study area. No occurrences documented within 5 miles of the project site.
Suisun shrew Sorex ornatus sinuosus	/CSC	Tidal salt and brackish marshes of San Pablo Bay and Suisun Marsh bounded on the west by Tubbs Island (Sonoma County) and on the east by Collinsville (Solano County).	Low. Marginally suitable habitat is present within the project study area in the brackish marsh of the project site bordering the tributary to Pacheco Creek though species unlikely to stray as far south as the Project site from Suisun Bay. Nearest species occurrence is located approximately 7 miles northwest of the project site within Benicia State Recreation Area.
American badger <i>Taxidea taxus</i>	/CSC/	Most abundant in drier open stages of most shrub, forest, and herbaceous habitats, with friable soils. Needs sufficient food, friable soils and open, uncultivated ground. Preys on burrowing rodents.	<b>Low.</b> Marginally suitable habitat is present in the project study area. No occurrences documented within 10 miles of the project site.

#### STATUS CODES

#### Federal (U.S. Fish and Wildlife Service [USFWS]):

FE = Listed as Endangered (in danger of extinction) by the federal government.

FT = Listed as Threatened (likely to become Endangered within the foreseeable future) by the federal government.

DL - Delisted

State (California Department of Fish and Wildlife [CDFW]):

CE = Listed as Endangered by the State of California.

CT = Listed as Threatened by the State of California.

CR = Listed as Rare by the State of California (plants only)

CCE = Candidate for listing as Endangered by the State of California

CCT = Candidate for listing as Threatened by the State of California

DL = Delisted

CFP = Fully Protected by the State of California

CSC = California Species of Special Concern.

WL = Watch List

3503.5 = Protection for species of Falconiformes (hawks) and Strigiformes (owls).

\*Special animal—listed on CDFW's Special Animals List.

#### California Native Plant Society (CNPS):

List 1A=Plants presumed extinct in California.

List 1B=Plants rare. Threatened, or Endangered in California and elsewhere.

List 2= Plants rare, Threatened, or Endangered in California but more common elsewhere.

An extension reflecting the level of threat to each species is appended to each rarity category as follows:

- .1 Seriously endangered in California.
- .2 Fairly endangered in California.
- .3 Not very endangered in California.

#### Western Bay Working Group (WBWG):

WBWG-H = High priority; Species that are imperiled or at a high risk of imperilment.

WBWG-M = Medium priority; Species that warrant a closer evaluation due to potential imperilment.

#### SOURCE:

U.S. Fish and Wildlife Service (USFWS), 2021. IPaC Trust Resources Report for Bayview Residential Project. Available online: https://ecos.fws.gov/ipac/. Generated April 16, 2021.

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eBird, 2020. eBird: An online database of bird distribution and abundance [web application]. Waterbird Regional Preserve (including McNabney Marsh) Hotspot. eBird, Ithica, New York. [http://www.ebird.org] Accessed September 24, 2020.