

**Table C-1. Special-Status Wildlife Species Known to Occur or with Potential to Occur in East Contra Costa County**

Common and Scientific Name	Status <sup>a</sup>		Habitats	Likelihood for Occurrence in Plan Area <sup>b</sup>
	Federal/State	California Distribution		
<b>Invertebrates</b>				
Longhorn fairy shrimp <i>Branchinecta longiantenna</i>	E/-	Eastern margin of central Coast Ranges from Contra Costa County to San Luis Obispo County; disjunct population in Madera County	Small, clear pools in sandstone rock outcrops of clear to moderately turbid clay- or grass-bottomed pools	High. Covered species under proposed Plan
Vernal pool fairy shrimp <i>Branchinecta lynchi</i>	T/-	Central Valley, central and south Coast Ranges from Tehama County to Santa Barbara County; isolated populations also in Riverside County	Common in vernal pools; also found in sandstone rock outcrop pools	High. Covered species under proposed Plan
Midvalley fairy shrimp <i>Branchinecta mesovallensis</i>	PE/-	Central Valley, scattered populations in Sacramento, Solano, Contra Costa, San Joaquin, Madera, Merced, and Fresno Counties	Small, short-lived vernal pools, seasonal wetlands and depressions	High. Covered species under proposed Plan
Vernal pool tadpole shrimp <i>Lepidurus packardii</i>	E/-	Shasta County south to Merced County	Vernal pools and ephemeral stock ponds	High. Two CNDDDB records from inventory area
Valley elderberry longhorn beetle <i>Desmocerus californicus dimorphus</i>	T/-	Stream side habitats below 3,000 feet throughout the Central Valley	Riparian and oak savanna habitats with elderberry shrubs; elderberries are the host plant	High. Species may occur in suitable habitat eastern fringe of inventory area; impacts would be limited
Delta green ground beetle <i>Elaphrus viridus</i>	T/-	Restricted to Olcott Lake and other vernal pools at Jepson Prairie Preserve, Solano County	Sparsely vegetated edges of vernal lakes and pools; occur up to 250 feet from pools	Low. No CNDDDB records from project area
Bay checkerspot butterfly <i>Euphydryas editha bayensis</i>	T/-	Vicinity of San Francisco Bay including San Francisco peninsula in San Mateo County, and mountains near San Jose, Santa Clara County	Native grasslands on outcrops of serpentine soil; California plantain and owl's clover are host plants	Low. No CNDDDB records from project area
Lange's metalmark butterfly <i>Apodemia mormo langei</i>	E/-	Once found throughout the Antioch Dunes; range now reduced to less than 10 acres of Antioch Dunes in Contra Costa County	Limited to dense to moderately dense patches of food plant, wild buckwheat, in stabilized sand dunes	Low. No CNDDDB records from project area

Table C-1. Continued

Common and Scientific Name	Status <sup>a</sup>		Habitats	Likelihood for Occurrence in Plan Area <sup>b</sup>
	Federal/State	California Distribution		
Callippe silverspot butterfly <i>Speyeria callippe callippe</i>	E/-	San Bruno Mountain, San Mateo County, and a single location in Alameda County	Open hillsides where wild pansy ( <i>Viola pendunculata</i> ) grows; larvae feed on Johnny jump-up plants, whereas adults feed on native mints and non-native thistles	Low. Project area outside current and known range of species
<b>Amphibians</b>				
California tiger salamander <i>Ambystoma californiense</i> (= <i>A. tigrinum</i> c.)	T/SSC	Central Valley, including Sierra Nevada foothills, up to approximately 1,000 feet, and coastal region from Butte County south to northeastern San Luis Obispo County	Small ponds, lakes, or vernal pools in grass-lands and oak woodlands for larvae; rodent burrows, rock crevices, or fallen logs for cover for adults and for summer dormancy	High. Covered species under proposed Plan
Western spadefoot <i>Scaphiopus hammondi</i>	-/SSC	Sierra Nevada foothills, Central Valley, Coast Ranges, coastal counties in southern California	Shallow streams with riffles and seasonal wetlands, such as vernal pools in annual grasslands and oak woodlands	Moderate. Suitable habitat present in program area
California red-legged frog <i>Rana aurora draytoni</i>	T/SSC	Found along the coast and coastal mountain ranges of California from Marin County to San Diego County and in the Sierra Nevada from Tehema County to Fresno County	Permanent and semipermanent aquatic habitats, such as creeks and cold-water ponds, with emergent and submergent vegetation; may estivate in rodent burrows or cracks during dry periods	High. Covered species under proposed Plan
Foothill yellow-legged frog <i>Rana boylei</i>	-/SSC	Occurs in the Klamath, Cascade, north Coast, south Coast, Transverse, and Sierra Nevada Ranges up to approximately 6,000 feet	Creeks or rivers in woodland, forest, mixed chaparral, and wet meadow habitats with rock and gravel substrate and low overhanging vegetation along the edge; usually found near riffles with rocks and sunny banks nearby	High. Covered species under proposed Plan
<b>Reptiles</b>				
Northwestern pond turtle <i>Clemmys marmorata marmorata</i>	-/SSC	Occurs from the Oregon border of Del Norte and Siskiyou Counties south along the coast to San Francisco Bay, inland through the Sacramento Valley, and on the western slope of Sierra Nevada	Occupies ponds, marshes, rivers, streams, and irrigation canals with muddy or rocky bottoms and with watercress, cattails, water lilies, or other aquatic vegetation in woodlands, grasslands, and open forests	High. Suitable habitat in project area; CNDDDB records from inventory area

Table C-1. Continued

Common and Scientific Name	Status <sup>a</sup>		Habitats	Likelihood for Occurrence in Plan Area <sup>b</sup>
	Federal/State	California Distribution		
Western pond turtle <i>Clemmys marmorata</i>	-/SSC	The range of the Western Pond Turtle extends from southern British Columbia down through western Washington and Oregon and Northern California; the largest populations are scattered from southern Oregon to California where they are well adapted to the arid climate; the species is uncommon in the rest of its range	Occupies streams, large rivers, and slow-moving water; they are most common in areas with large rocks and boulders, where they go to bask in the sun; although the turtles need to live around water bodies, they can survive drought in the more arid regions by digging into the mud in dried up riverbeds	Extant populations occur within the Plan area; commonly found in Marsh Creek through Round Valley south to Morgan Territory; CNDDDB records include 27 documented observations of western pond turtle within the inventory area. Covered species under proposed Plan
California horned lizard <i>Phrynosoma coronatum frontale</i>	-/SSC	Sacramento Valley, including foothills, south to southern California; Coast Ranges south of Sonoma County; below 4,000 feet in northern California	Grasslands, brushlands, woodlands, and open coniferous forest with sandy or loose soil; requires abundant ant colonies for foraging	High. Suitable habitat in project area; CNDDDB records from inventory area
Silvery legless lizard <i>Anniella pulchra pulchra</i>	-/SSC	Along the Coast, Transverse, and Peninsular Ranges from Contra Costa County to San Diego County with spotty occurrences in the San Joaquin Valley	Habitats with loose soil for burrowing or thick duff or leaf litter; often forages in leaf litter at plant bases; may be found on beaches, sandy washes, and in woodland, chaparral, and riparian areas	High. Suitable habitat in project area; CNDDDB records from inventory area; covered species under proposed Plan
Giant garter snake <i>Thamnophis couchi gigas</i>	T/T	Central Valley from the vicinity of Burrel in Fresno County north to near Chico in Butte County; has been extirpated from areas south of Fresno	Sloughs, canals, low gradient streams and freshwater marsh habitats where there is a prey base of small fish and amphibians; also found in irrigation ditches and rice fields; requires grassy banks and emergent vegetation for basking and areas of high ground protected from flooding during winter	Moderate. Area is on edge of species range; no CNDDDB records; covered species under proposed Plan
San Joaquin whipsnake <i>Masticophis flagellum ruddocki</i>	-/SSC	From Colusa county in the Sacramento Valley southward to the grapevine in the San Joaquin Valley and westward into the inner coast ranges; an isolated population occurs at Sutter Buttes; known elevational range from 20–900 meters	Occurs in open, dry, vegetative associations with little or no tree cover; it occurs in valley grassland and saltbush scrub associations; often occurs in association with mammal burrows	Moderate. Suitable habitat in project area; CNDDDB record from inventory area
Alameda whipsnake <i>Masticophis lateralis euryxanthus</i>	T/T	Restricted to Alameda and Contra Costa Counties; fragmented into 5 disjunct populations throughout its range	Valleys, foothills, and low mountains associated with northern coastal scrub or chaparral habitat; requires rock outcrops for cover and foraging	High. Suitable habitat in project area; CNDDDB records from inventory area; covered species under proposed Plan

Table C-1. Continued

Common and Scientific Name	Status <sup>a</sup>		Habitats	Likelihood for Occurrence in Plan Area <sup>b</sup>
	Federal/State	California Distribution		
<b>Birds</b>				
American white pelican <i>Pelecanus erythrorhynchos</i> (nesting colony)	–/SSC	Historically, nested at large lakes throughout California; only breeding colonies in the state occur at lower Klamath National Wildlife Refuge, Siskiyou County, and at Clear Lake, Modoc County; winters along the California coast from southern Sonoma Count	Freshwater lakes with islands for breeding; inhabits river sloughs, freshwater marshes, salt ponds, and coastal bays during the rest of the year	Moderate. Suitable habitat in project area; no CNDDDB records from inventory area
California brown pelican <i>Pelecanus occidentalis californicus</i> (nesting colony)	E/E	Present along the entire coastline, but does not breed north of Monterey County; extremely rare inland	Typically in littoral ocean zones, just outside the surf line; nests on offshore islands	Moderate. Suitable habitat in project area; no CNDDDB records from inventory area
Double-crested cormorant <i>Phalacrocorax auritus</i> (rookery site)	–/SSC	Winters along the entire California coast and inland over the Coast Ranges into the Central Valley from Tehama County to Fresno County; a permanent resident along the coast from Monterey County to San Diego County, along the Colorado River, Imperial, Riverside, Kern and King Counties, and the islands off San Francisco; breeds in Siskiyou, Modoc, Lassen, Shasta, Plumas, and Mono Counties; also breeds in the San Francisco Bay Area and in Yolo and Sacramento Counties	Rocky coastlines, beaches, inland ponds, and lakes; needs open water for foraging, and nests in riparian forests or on protected islands, usually in snags	High. Suitable habitat present; breeds within ECCC inventory area
Great blue heron <i>Ardea herodias</i> (rookery)	–/–	Nests in suitable habitat throughout California except at higher elevations in Sierra Nevada and Cascade mountain ranges	Widely distributed in freshwater and calm-water intertidal habitats	High. Suitable nesting habitat present; CNDDDB records within area
Western least bittern <i>Ixobrychus exilis hesperis</i> (nesting)	–/SSC	Permanent residents along the Colorado River and Salton Sea and in isolated areas in Imperial, San Diego, and Los Angeles Counties; summers at Tulare Lake and parts of Fresno, Merced, Madera, Siskiyou, and Modoc Counties; and in marshlands of Yolo, Sutter	Marshes and along pond edges, where tules and rushes can provide cover; nests are built low in the tules over the water	Moderate. Suitable habitat in project area; no CNDDDB records from inventory area

Table C-1. Continued

Common and Scientific Name	Status <sup>a</sup>		Habitats	Likelihood for Occurrence in Plan Area <sup>b</sup>
	Federal/State	California Distribution		
White-faced ibis <i>Plegadis chihi</i> (rookery site)	-/SSC	Both resident and winter populations on the Salton Sea and in isolated areas in Imperial, San Diego, Ventura, and Fresno Counties; breeds at Honey Lake, Lassen County, at Mendota Wildlife Management Area, Fresno County, and near Woodland, Yolo County	Prefers freshwater marshes with tules, cattails, and rushes, but may nest in trees and forage in flooded agricultural fields, especially flooded rice fields	Moderate. Suitable habitat in project area; no CNDDDB records from inventory area
Tule white-fronted goose <i>Anser albifrons elgasi</i>	-/SSC	Winters locally in the northern San Francisco Bay region and in the Central Valley	Winters in marshes and agricultural fields	Moderate. Suitable habitat in project area; no CNDDDB records from inventory area
Aleutian Canada goose <i>Branta canadensis leucopareia</i>	T/-	The entire population winters in Butte Sink, then moves to Los Banos, Modesto, the Delta, and East Bay reservoirs; stages near Crescent City during spring before migrating to breeding grounds	Roosts in large marshes, flooded fields, stock ponds, and reservoirs; forages in pastures, meadows, and harvested grainfields; corn is especially preferred	Moderate. Suitable habitat in project area; no CNDDDB records from inventory area
Northern harrier <i>Circus cyaneus</i>	-/SSC	Occurs throughout lowland California; has been recorded in fall at high elevations	Grasslands, meadows, marshes, and seasonal and agricultural wetlands	High. Suitable habitat present in project area
Golden eagle <i>Aquila chrysaetos</i>	-/SSC, FP	Foothills and mountains throughout California; uncommon nonbreeding visitor to lowlands such as the Central Valley	Nest on cliffs and escarpments or in tall trees overlooking open country; forages in annual grasslands, chaparral, and oak woodlands with plentiful medium and large-sized mammals	High. Covered species under proposed Plan
Osprey <i>Pandion haliaetus</i>	-/SSC	Nests along the north coast from Marin County to Del Norte County, east through the Klamath and Cascade Ranges, and in the upper Sacramento Valley; important inland breeding populations at Shasta Lake, Eagle Lake, and Lake Almanor and small numbers elsewhere south through the Sierra Nevada; winters along the coast from San Mateo County to San Diego County	Nests in snags, trees, or utility poles near the ocean, large lakes, or rivers with abundant fish populations	Moderate. Suitable habitat in project area; no CNDDDB records from inventory area

Table C-1. Continued

Common and Scientific Name	Status <sup>a</sup>		Habitats	Likelihood for Occurrence in Plan Area <sup>b</sup>
	Federal/State	California Distribution		
Bald eagle <i>Haliaeetus leucocephalus</i>	T/E	Nests in Siskiyou, Modoc, Trinity, Shasta, Lassen, Plumas, Butte, Tehama, Lake, and Mendocino Counties and in the Lake Tahoe Basin; reintroduced into central coast; winter range includes the rest of California, except the southeastern deserts, very high altitudes in the Sierra Nevada, and east of the Sierra Nevada south of Mono County	In western North America, nests and roosts in coniferous forests within 1 mile of a lake, reservoir, stream, or the ocean	Moderate. CNDDDB records from inventory area; limited suitable habitat in project area
Sharp-shinned hawk <i>Accipiter striatus</i>	-/SSC	Permanent resident in the Sierra Nevada, Cascade, Klamath, and north Coast Ranges at mid elevations and along the coast in Marin, San Francisco, San Mateo, Santa Cruz, and Monterey Counties; winters over the rest of the state except at very high elevations	Dense canopy ponderosa pine or mixed-conifer forest and riparian habitats	Unknown. Suitable habitat in project area; no CNDDDB records
Cooper's hawk <i>Accipiter cooperii</i>	-/SSC	Throughout California except high altitudes in the Sierra Nevada; winters in the Central Valley, southeastern desert regions, and plains east of the Cascade Range	Nests in a wide variety of habitat types, from riparian woodlands and digger pine-oak woodlands through mixed conifer forests	Unknown. Suitable habitat in project area; no CNDDDB records
Swainson's hawk <i>Buteo swainsoni</i>	-/T	Lower Sacramento and San Joaquin Valleys, the Klamath Basin, and Butte Valley; highest nesting densities occur near Davis and Woodland, Yolo County	Nests in oaks or cottonwoods in or near riparian habitats; forages in grasslands, irrigated pastures, and grain fields	High. Covered species under proposed Plan
Ferruginous hawk <i>Buteo regalis</i>	-/SSC	Does not nest in California; winter visitor along the coast from Sonoma County to San Diego County, east-ward to the Sierra Nevada foothills and south-eastern deserts, the Inyo-White Mountains, the plains east of the Cascade Range, and Siskiyou County	Open terrain in plains and foothills where ground squirrels and other prey are available	Unknown. Suitable habitat in project area; no CNDDDB records
White-tailed kite <i>Elanus leucurus</i>	-/FP	Lowland areas west of Sierra Nevada from the head of the Sacramento Valley south, including coastal valleys and foothills to western San Diego County at the Mexico border	Low foothills or valley areas with valley or live oaks, riparian areas, and marshes near open grasslands for foraging	High. Suitable habitat in project area; known from inventory area

Table C-1. Continued

Common and Scientific Name	Status <sup>a</sup>		Habitats	Likelihood for Occurrence in Plan Area <sup>b</sup>
	Federal/State	California Distribution		
American peregrine falcon <i>Falco peregrinus anatum</i>	-/E, FP	Permanent resident along the north and south Coast Ranges; may summer in the Cascade and Klamath Ranges and through the Sierra Nevada to Madera County; winters in the Central Valley south through the Transverse and Peninsular Ranges and the plains east of the Cascade Range	Nests and roosts on protected ledges of high cliffs, usually adjacent to lakes, rivers, or marshes that support large prey populations	High. Known from East Contra Costa County inventory area; suitable habitat present
Prairie falcon <i>Falco mexicanus</i>	-/SSC	Permanent resident in the south Coast, Transverse, Peninsular, and northern Cascade Ranges, the southeastern deserts, Inyo-White Mountains, foothills surrounding the Central Valley, and in the Sierra Nevada in Modoc, Lassen, and Plumas Counties; winters in the Central Valley, along the coast from Santa Barbara County to San Diego County, and in Marin, Sonoma, Humboldt, Del Norte, and Inyo Counties	Nests on cliffs or escarpments, usually overlooking dry, open terrain or uplands	Unknown. Suitable habitat present; no CNDDDB records
California clapper rail <i>Rallus longirostris obsoletus</i>	E/E	Marshes around the San Francisco Bay and east through the Delta to Suisun Marsh	Restricted to salt marshes and tidal sloughs; usually associated with heavy growth of pickle-weed; feeds on mollusks removed from the mud in sloughs	Moderate. One CNDDDB record from East Contra Costa County inventory area; suitable habitat present
California black rail <i>Laterallus jamaicensis coturniculus</i>	-/T	Permanent resident in the San Francisco Bay and east-ward through the Delta into Sacramento and San Joaquin Counties; small populations in Marin, Santa Cruz, San Luis Obispo, Orange, Riverside, and Imperial Counties	Tidal salt marshes associated with heavy growth of pickleweed; also occurs in brackish marshes or freshwater marshes at low elevations	High. Known from East Contra Costa County inventory area; suitable habitat present
Greater sandhill crane <i>Grus canadensis tabida</i>	-/T	Breeds in Siskiyou, Modoc, Lassen, Plumas, and Sierra Counties; winters in the Central Valley, southern Imperial County, Lake Havasu National Wildlife Refuge, and the Colorado River Indian Reserve	Summers in open terrain near shallow lakes or freshwater marshes; winters in plains and valleys near bodies of fresh water	Low. No CNDDDB records from East Contra Costa County inventory area

Common and Scientific Name	Status <sup>a</sup>		Habitats	Likelihood for Occurrence in Plan Area <sup>b</sup>
	Federal/State	California Distribution		
Mountain plover (wintering) <i>Charadrius montanus</i>	PT/SSC	Population defined as those birds that nest adjacent to or near tidal waters, including all nests along the mainland coast, peninsulas, offshore islands, and adjacent bays and estuaries; twenty breeding sites are known in California from Del Norte to Diego County	Coastal beaches above the normal high tide limit in flat, open areas with sandy or saline substrates; vegetation and driftwood are usually sparse or absent	Low. No CNDDDB records from East Contra Costa County inventory area
Long-billed curlew <i>Numenius americanus</i>	-/SSC	Nests in northeastern California in Modoc, Siskiyou, and Lassen Counties; winters along the coast and in interior valleys west of Sierra Nevada	Nests in high-elevation grasslands adjacent to lakes or marshes; during migration and in winter; frequents coastal beaches and mudflats and interior grasslands and agricultural fields	Low. No CNDDDB records from East Contra Costa County inventory area
California least tern <i>Sterna antillarum</i> (=albifrons) <i>browni</i> (nesting colony)	E/E	Nests on beaches along the San Francisco Bay and along the southern California coast from southern San Luis Obispo County south to San Diego County	Nests on sandy, upper ocean beaches, and occasionally uses mudflats; forages on adjacent surf line, estuaries, or the open ocean	Moderate. Two CNDDDB records from area; winter migrant only
Western burrowing owl <i>Athene cunicularia hypugaea</i>	-/SSC	Lowlands throughout California, including the Central Valley, northeastern plateau, southeastern deserts, and coastal areas; rare along south coast	Level, open, dry, heavily grazed or low stature grassland or desert vegetation with available burrows	High. Covered species under proposed Plan
Short-eared owl <i>Asio flammeus</i>	-/SSC	Permanent resident along the coast from Del Norte County to Monterey County although very rare in summer north of San Francisco Bay, in the Sierra Nevada north of Nevada County, in the plains east of the Cascades, and in Mono County; small, isolated populations	Freshwater and salt marshes, lowland meadows, and irrigated alfalfa fields; needs dense tules or tall grass for nesting and daytime roosts	Moderate. Suitable habitat in plan area; CNDDDB records from inventory area
Black swift <i>Cypseloides niger</i> (nesting)	-/SSC	Breeds very locally in the Sierra Nevada and Cascade Range, the San Gabriel, San Bernardino, and San Jacinto mountains, and in coastal bluffs from San Mateo county south to near San Luis Obispo county	Nests in moist crevice or cave on sea cliffs above the surf, or on cliffs behind, or adjacent to, waterfalls in deep canyons	Low. Limited habitat present in project area



Table C-1. Continued

Common and Scientific Name	Status <sup>a</sup>		Habitats	Likelihood for Occurrence in Plan Area <sup>b</sup>
	Federal/State	California Distribution		
Vaux's swift <i>Chaetura vauxi</i>	-/SSC	Coastal belt from Del Norte County south to Santa Cruz County and in mid elevation forests of the Sierra Nevada and Cascade Range	Nests in hollow, burned-out tree trunks in large conifers	Low. Limited habitat present in project area
Little willow flycatcher <i>Empidonax traillii brewsteri</i>	SE/-	Summers along the western Sierra Nevada from El Dorado to Madera County, in the Cascade and northern Sierra Nevada in Trinity, Shasta, Tahama, Butte, and Plumas Counties, and along the eastern Sierra Nevada from Lassen to Inyo County	Riparian areas and large wet meadows with abundant willows; usually found in riparian habitats during migration	Low. No CNDDDB records from project area
California horned lark <i>Eremophila alpestris actia</i>	-/SSC	Found throughout much of the state, less common in mountainous areas of the north coast and in coniferous or chaparral habitats	Common to abundant resident in a variety of open habitats, usually where large trees and shrubs are absent; grasslands and deserts to dwarf shrub habitats above tree line	High. Known from East Contra Costa County inventory area (CNDDDB); suitable habitat present in project area
Bank swallow <i>Riparia riparia</i>	-/T	Occurs along the Sacramento River from Tahama County to Sacramento County, along the Feather and lower American Rivers, in the Owens Valley; and in the plains east of the Cascade Range in Modoc, Lassen, and northern Siskiyou Counties; small populations near the coast from San Francisco County to Monterey County	Nests in bluffs or banks, usually adjacent to water, where the soil consists of sand or sandy loam	Low. Only rare migrant, no suitable nesting habitat in project area
Loggerhead shrike <i>Lanius ludovicianus</i>	-/SSC	Resident and winter visitor in lowlands and foothills throughout California; rare on coastal slope north of Mendocino County, occurring only in winter	Prefers open habitats with scattered shrubs, trees, posts, fences, utility lines, or other perches	High. Suitable habitat present; CNDDDB record from inventory area
Suisun song sparrow <i>Melospiza melodia maxillaris</i>	-/SSC	Restricted to the extreme western edge of the Delta, between the cities of Vallejo and Pittsburg near Suisun Bay	Brackish and tidal marshes supporting cattails, tules, various sedges, and pickleweed	High. Known from area (CNDDDB); suitable habitat present
Saltmarsh common yellowthroat <i>Geothlypis trichas sinuosa</i>	-/SSC	Found only in the San Francisco Bay Area in Marin, Napa, Sonoma, Solano, San Francisco, San Mateo, Santa Clara, and Alameda Counties	Freshwater marshes in summer and salt or brackish marshes in fall and winter; requires tall grasses, tules, and willow thickets for nesting and cover	Moderate. One CNDDDB record from area; suitable habitat present

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	Federal/State	California Distribution		
Bell's sage sparrow <i>Amphispiza belli belli</i>	-/SSC	Western Sierra foothills from El Dorado County south to Mariposa County, inner Coast Ranges from Shasta County southward, extending to vicinity of coast from Marin County to San Diego County; from southern San Benito County to San Bernardino County	Prefers chaparral habitats dominated by chamise	High. Known from East Contra Costa County inventory area; suitable habitat present
Tricolored blackbird <i>Agelaius tricolor</i>	-/SSC	Permanent resident in the Central Valley from Butte County to Kern County; breeds at scattered coastal locations from Marin County south to San Diego County; and at scattered locations in Lake, Sonoma, and Solano Counties; rare nester in Siskiyou, Modoc, and Lassen Counties	Nests in dense colonies in emergent marsh vegetation, such as tules and cattails, or upland sites with blackberries, nettles, thistles, and grainfields; habitat must be large enough to support 50 pairs; probably requires water at or near the nesting colony	High. Known from East Contra Costa County inventory area; suitable habitat present
Yellow warbler <i>Dendroica petechia brewsteri</i> (nesting)	-/SSC	Nests over all of California except the Central Valley, the Mojave Desert region, and high altitudes and the eastern side of the Sierra Nevada; winters along the Colorado River and in parts of Imperial and Riverside Counties; two small permanent populations in San Diego and Santa Barbara Counties	Nests in riparian areas dominated by willows, cottonwoods, sycamores, or alders or in mature chaparral; may also use oaks, conifers, and urban areas near stream courses	High. No CNDDDB records from East Contra Costa County inventory area
Alameda (South Bay) song sparrow <i>Melospiza melodia pusillula</i>	-/SSC	Found only in marshes along the southern portion of the San Francisco Bay	Brackish marshes associated with pickleweed; may nest in tall vegetation or among the pickleweed	Low. No CNDDDB records from East Contra Costa County inventory area
San Pablo song sparrow <i>Melospiza melodia samuelis</i>	-/SSC	Found in San Pablo Bay	Uses tidal sloughs within pickleweed marshes; requires tall bushes (usually grindelia) along sloughs for cover, nesting, and songposts; forages over mudbanks and in the pickleweed	Low. No CNDDDB records from East Contra Costa County inventory area
<b>Mammals</b>				
Suisun ornate shrew <i>Sorex ornatus sinuosus</i>	-/SSC	Restricted to San Pablo Bay and Suisun Bay, both in Solano County	Tidal, salt, and brackish marshes containing pickleweed, grindelia, bulrushes, or cattails; requires driftwood or other objects for nesting cover	Low. Project area is outside species current range

Table C-1. Continued

Common and Scientific Name	Status <sup>a</sup>		Habitats	Likelihood for Occurrence in Plan Area <sup>b</sup>
	Federal/State	California Distribution		
Pacific Townsend's (=western) big-eared bat <i>Corynorhinus townsendii townsendii</i>	-/SSC	Coastal regions from Del Norte County south to Santa Barbara County	Roosts in caves, tunnels, mines, and dark attics of abandoned buildings; very sensitive to disturbances and may abandon a roost after one onsite visit	High. Suitable habitat present; no CNDDDB records from area; covered species under proposed Plan
Yuma myotis <i>Myotis yumanensis</i>	-/SSC	Common and widespread throughout most of California except the Colorado and Mojave deserts	Found in a wide variety of habitats from sea level to 11,000 feet, but uncommon above 8,000 feet; optimal habitat is open forests and woodlands near water bodies	Unknown. Suitable habitat present; no CNDDDB records from area
Pallid bat <i>Antrozous pallidus</i>	-/SSC	Occurs throughout California except the high Sierra from Shasta to Kern County and the northwest coast, primarily at lower and mid elevations	Occurs in a variety of habitats from desert to coniferous forest; most closely associated with oak, yellow pine, redwood, and giant sequoia habitats in northern California and oak woodland, grassland, and desert scrub in southern California; relies heavily on trees for roosts	Unknown. Suitable habitat present; no CNDDDB records from area
Greater western mastiff bat <i>Eumops perotis californicus</i>	-/SSC	Occurs along the western Sierra primarily at low to mid elevations and widely distributed throughout the southern coast ranges; recent surveys have detected the species north to the Oregon border	Found in a wide variety of habitats from desert scrub to montane conifer; roosts and breeds in deep, narrow rock crevices, but may also use crevices in trees, buildings, and tunnels	Unknown. Suitable habitat present; no CNDDDB records from area
Riparian brush rabbit <i>Sylvilagus bachmani riparius</i>	E/E	Limited to San Joaquin County at Caswell State Park near the confluence of the Stanislaus and San Joaquin Rivers and Paradise Cut area on Union Pacific right-of-way lands	Native valley riparian habitats with large clumps of dense shrubs, low-growing vines, and some tall shrubs and trees	Low. No records from project area
Berkeley kangaroo rat <i>Dipodomys heermanni berkeleyensis</i>	-/-	Alameda and Contra Costa Counties	Open grassy hilltops and open spaces in chaparral and blue oak/digger pine woodlands; needs fine, deep well-drained soil for burrowing	Low. Species likely extirpated from project area; One CNDDDB occurrence from area less than 20 years old
San Francisco dusky-footed woodrat <i>Neotoma fuscipes annectens</i>	-/SSC	West side of Mount Diablo to coast and San Francisco Bay	Present in chaparral habitat and in forest habitats with a moderate understory	Unknown. Project area not within species' current range

Common and Scientific Name	Status <sup>a</sup>		Habitats	Likelihood for Occurrence in Plan Area <sup>b</sup>
	Federal/State	California Distribution		
Salt marsh harvest mouse <i>Reithrodontomys raviventris</i>	E/E, FP	San Francisco, San Pablo, and Suisun Bays; the Delta	Salt marshes with a dense plant cover of pickle-weed and fat hen; adjacent to an upland site	Moderate. Suitable habitat present; CNDDDB records from area
San Joaquin kit fox <i>Vulpes macrotis mutica</i>	E/T	Principally occurs in the San Joaquin Valley and adjacent open foothills to the west; recent records from 17 counties extending from Kern County north to Contra Costa County	Saltbush scrub, grassland, oak, savanna, and freshwater scrub	Moderate. Suitable habitat present; CNDDDB records from area; covered species under proposed Plan

a Species Status explanations:

**Federal**

- E = listed as endangered under the federal Endangered Species Act.
- T = listed as threatened under the federal Endangered Species Act.
- PE = proposed for federal listing as endangered under the federal Endangered Species Act.
- PT = proposed for federal listing as threatened under the federal Endangered Species Act.
- = no listing.

**State**

- E = listed as endangered under the California Endangered Species Act.
- T = listed as threatened under the California Endangered Species Act.
- FP = fully protected under the California Fish and Game Code.
- SSC = species of special concern in California.
- = no listing.

b Likelihood for Occurrence in Plan Area

The determinations of the potential for each species to occur is generally based on the following criteria:

- Low:** The project site is within the species range and suitable habitat for the species occurs in the project vicinity, but was not identified in the project area.
- Moderate:** The project site is within the species range and suitable habitat for the species is present at the project site, however there are no records for the species in the project vicinity.
- High:** The project site is within the species range and suitable habitat for the species is present at the project site, and there are one or more records of the species in the project vicinity or the species was observed at the project site or in the project vicinity.

**Table C-2.** Special-Status Plants Known to Occur or with Potential to Occur in East Contra Costa County

Common and Scientific Name	Legal Status <sup>a</sup>		Habitat Requirements	Blooming Period	Likelihood for Occurrence in Plan Area <sup>b</sup>
	Federal/State/ CNPS	California Distribution			
Large-flowered fiddleneck <i>Amsinckia grandiflora</i>	E/E/1B	Mt. Diablo foothills in Alameda, Contra Costa, and San Joaquin Counties, currently known from only three natural occurrences	Annual grassland, cismontane woodland, on open grassy slopes below 1,200 feet	Apr–May	High. All natural occurrences in the Plan Area have been extirpated; the existing occurrence is a reintroduced population; No-Take Species
Mount Diablo manzanita <i>Arctostaphylos auriculata</i>	–/–/1B	Endemic to Contra Costa County especially Mt. Diablo area, San Francisco Bay area	Chaparral in canyons and on slopes on sandstone, 490–1,650 feet	Jan–Mar	High. Known occurrence; covered species under proposed Plan
Contra Costa manzanita <i>Arctostaphylos manzanita</i> <i>ssp. laevigata</i>	–/–/1B	Eastern San Francisco Bay region, Mt. Diablo, southern inner north coast range, Vaca Mountains, Contra Costa County	Rocky areas in chaparral on sandstone, 1,640–3,600 feet	Jan–Feb	High. All Contra Costa County occurrences in Mt. Diablo State Park or EBRPD
Suisun Marsh aster <i>Aster lentus</i>	SC/–/1B	Sacramento–San Joaquin Delta, Suisun Marsh, Suisun Bay; Contra Costa, Napa, Sacramento, San Joaquin, and Solano Counties	Brackish and freshwater marsh, below 500 feet	Aug–Nov	Low. Tidal marsh
Alkali milk-vetch <i>Astragalus tener</i> var. <i>tener</i>	–/–/1B	Merced, Solano, and Yolo Counties; historically more widespread	Grassy flats and vernal pool margins, on alkali soils, below 200 feet	Mar–Jun	Moderate. Historic occurrence; insufficient data to determine whether plant still exists in HCP/NCCP inventory area; No-Take Species
Brittlescale <i>Atriplex depressa</i>	–/–/1B	Sacramento Valley and valleys of adjacent foothills on west side of San Joaquin Valley	Alkali grassland, alkali meadow, alkali scrub, chenopod scrub, playas, valley and foothill grasslands on alkaline or clay soils, below 660 feet	May–Oct	High. Known occurrence; covered species under proposed Plan
San Joaquin spearscale <i>Atriplex joaquiniana</i>	SC/–/1B	West edge of Central Valley from Glenn County to Tulare County	Alkali grassland, alkali scrub, alkali meadows, saltbush scrub, below 1,000 feet	Apr–Sept	High. Known occurrence; covered species under proposed Plan
Big tarplant <i>Blepharizonia plumosa</i> ssp. <i>plumosa</i>	–/–/1B	Interior Coast Range foothills, Alameda, Contra Costa, San Joaquin, Stanislaus*, and Solano* Counties	Annual grassland, on dry hills and plains, 50–1,500 feet	Jul–Oct	High. Known occurrence; covered species under proposed Plan

Table C-2. Continued

Common and Scientific Name	Legal Status <sup>a</sup>		Habitat Requirements	Blooming Period	Likelihood for Occurrence in Plan Area <sup>b</sup>
	Federal/State/ CNPS	California Distribution			
Mount Diablo fairy-lantern <i>Calochortus pulchellus</i>	-/-/1B	Northeastern San Francisco Bay, Mt. Diablo, Endemic to Contra Costa and Alameda Counties	On wooded, brushy slopes of chaparral, cismontane woodland, riparian woodland, valley and foothill grassland, 650–2,600 feet	Apr–Jun	High. Known occurrence; covered species under proposed Plan
Bristly sedge <i>Carex comosa</i>	-/-/2	Scattered occurrences throughout California, Oregon and Washington	Wet places and lake margins	May–Sep	Low. Tidal marsh
Congdon's tarplant (spikeweed) <i>Centromadia</i> (Hemizonia) <i>parryi</i> ssp. <i>congdonii</i>	SC/-/1B	East San Francisco Bay Area, Salinas Valley, Los Osos Valley	Annual grassland, on lower slopes, flats, and swales, sometimes on alkaline or saline soils, below 700 feet	Jun–Nov	High. No records from HCP/NCCP inventory area
Soft bird's-beak <i>Cordylanthus mollis</i> ssp. <i>mollis</i>	E/R/1B	San Francisco Bay region, Suisun Marsh, Contra Costa, Marin*, Napa, Solano, Sacramento*, and Sonoma* Counties	Tidal salt marsh	Jul–Sep	Low. Tidal marsh
Mount Diablo bird's-beak <i>Cordylanthus nidularius</i>	SC/R/1B	Northeastern San Francisco Bay, eastern slope of Mt. Diablo, Endemic to Contra Costa County	Chaparral on serpentinite	Jul–Aug	Moderate. Only known occurrence in Mt. Diablo State Park
Hospital Canyon larkspur <i>Delphinium californicum</i> ssp. <i>interius</i>	SC/-/1B	Inner South Coast Ranges, eastern San Francisco Bay, Alameda, Contra Costa, Merced, San Benito, Santa Clara, San Joaquin, and San Luis Obispo Counties	Openings in chaparral, mesic cismontane woodland, on moist slopes and ravines, 750–3,600 feet	Apr–Jun	Moderate. All Contra Costa County occurrences in Mt. Diablo State Park
Recurved larkspur <i>Delphinium recurvatum</i>	SC/-/1B	San Joaquin Valley and central valley of the South Coast Ranges, Contra Costa County to Kern County	Subalkaline soils in annual grassland, saltbush scrub, cismontane woodland, vernal pools, 100–2,000 feet	Mar–May	High. Known occurrence; covered species under proposed Plan
Mount Diablo buckwheat <i>Eriogonum truncatum</i>	-/-/1A	Historically known from Alameda, Contra Costa and Solano Counties	Coarse sandy soil in grasslands, 1,000–2,000 feet	Apr–Sep	Low. Presumed to be extinct; no information on historic occurrences in HCP/NCCP inventory area; No-Take Species

Table C-2. Continued

Common and Scientific Name	Legal Status <sup>a</sup>		California Distribution	Habitat Requirements	Blooming Period	Likelihood for Occurrence in Plan Area <sup>b</sup>
	Federal/State/ CNPS					
Round-leaved filaree <i>Erodium macrophyllum</i>	-/-/1B		Sacramento Valley, northern San Joaquin Valley, Central Western California, South Coast, and northern Channel Islands (Santa Cruz Island)	Open sites, dry grasslands, and shrublands below 4,000 feet	Mar–May	High. Seven occurrences listed within the inventory area, in the Mt. Diablo foothills south of Antioch; six of the occurrences are only known from collections made in or before 1941; at least one of these may be extirpated. Covered species under proposed Plan
Delta button-celery <i>Eryngium racemosum</i>	SC/E/1B		San Joaquin River delta, floodplains, and adjacent Sierra Nevada foothills, Calaveras, Merced, San Joaquin*, and Stanislaus Counties	Riparian scrub, seasonally inundated depressions along floodplains on clay soils, below 250 feet	Jun–Aug	Low. Delta wetlands
Contra Costa wallflower <i>Erysimum capitatum</i> ssp. <i>angustatum</i>	E/E/1B		Contra Costa County	Inland dunes	Mar–Jul	Low. Occurrences are in Antioch Dunes National Wildlife Refuge
Diamond-petaled California poppy <i>Eschscholzia rhombipetala</i>	SC/-/1B		Interior foothills of south Coast Ranges from Contra Costa County to Stanislaus Counties, Carrizo Plain in San Luis Obispo County	Grassland, chenopod scrub, on clay soils, where grass cover is sparse enough to allow growth of low annuals	Mar–Apr	Moderate. No-Take Species
Fragrant fritillary <i>Fritillaria liliacea</i>	SC/-/1B		Coast Ranges from Marin County to San Benito County	Adobe soils of interior foothills, coastal prairie, coastal scrub, annual grassland, often on serpentinite, below 1,350 feet	Feb–Apr	High. No records from HCP/NCCP inventory area
Diablo helianthella (rock rose) <i>Helianthella castanea</i>	SC/-/1B		San Francisco Bay area, Alameda, Contra Costa, Marin*, San Francisco*, and San Mateo Counties	At chaparral/oak woodland ecotone, often in partial shade, on rocky soils, 80–3,800 feet	Apr–Jun	High. Known occurrence; covered species under proposed Plan

Table C-2. Continued

Common and Scientific Name	Legal Status <sup>a</sup>		California Distribution	Habitat Requirements	Blooming Period	Likelihood for Occurrence in Plan Area <sup>b</sup>
	Federal/State/ CNPS					
Brewer's dwarf (western) flax <i>Hesperolinon breweri</i>	SC/-/1B		Southern north inner Coast Range, northeast San Francisco Bay region, especially Mt. Diablo; known only from Contra Costa, Napa, and Solano Counties	Serpentine slopes in chaparral, and grasslands, 100–2,300 feet	May–Jul	High. All known Contra Costa County occurrences in Mt. Diablo State Park, EBRPD, or Contra Costa Water District lands, but may occur outside these areas; Covered Species
Rose-mallow / California hibiscus <i>Hibiscus lasiocarpus</i>	-/-/2		Central and southern Sacramento Valley, deltaic central valley, Butte, Contra Costa, Colusa, Glenn, Sacramento, San Joaquin, Solano, Sutter, and Yolo Counties	Wet banks, freshwater marshes, generally below 135 feet	Jun–Sep	Low. Delta wetlands
Contra Costa goldfields <i>Lasthenia conjugens</i>	E/-/1B		Scattered occurrences in Coast Range valleys and southwest edge of Sacramento Valley, Alameda, Contra Costa, Mendocino, Monterey, Napa, Santa Barbara*, Santa Clara*, and Solano Counties; historically distributed through the north coast, southern Sacramento Valley, San Francisco Bay region and the south coast	Alkaline or saline vernal pools and swales, below 700 feet	Mar–Jun	Low. All HCP/NCCP inventory area populations are extirpated; No-Take Species
Delta tule pea <i>Lathyrus jepsonii</i> var. <i>jepsonii</i>	SC/-/1B		Central valley, especially the San Francisco Bay region, Alameda, Contra Costa, Fresno, Marin, Napa, Sacramento, San Benito, Santa Clara*, San Joaquin, and Solano Counties	Coastal and estuarine marshes, below 1000 feet	May–Sep	Low. Delta wetlands
Mason's lilaepsis <i>Lilaeopsis masonii</i>	SC/R/1B		Southern Sacramento Valley, Sacramento–San Joaquin River Delta, northeast San Francisco Bay area, Alameda, Contra Costa, Marin*, Napa, Sacramento, San Joaquin, and Solano Counties	Freshwater and intertidal marshes, streambanks in riparian scrub, generally at sea level	Apr–Nov	Low. Delta wetlands
Delta mudwort <i>Limosella subulata</i>	-/-/2		Deltaic central valley, Contra Costa, Sacramento, San Joaquin, and Solano Counties; Oregon	Muddy or sandy intertidal flats and marshes, streambanks in riparian scrub generally at sea level	May–Aug	Low. Delta wetlands



Table C-2. Continued

Common and Scientific Name	Legal Status <sup>a</sup>		California Distribution	Habitat Requirements	Blooming Period	Likelihood for Occurrence in Plan Area <sup>b</sup>
	Federal/State/ CNPS					
Showy madia <i>Madia radiata</i>	-/-/1B		Scattered populations in the interior foothills of the south Coast Ranges, Contra Costa, Fresno, Kings, Kern, Monterey, Santa Barbara, San Benito, San Joaquin, and San Luis Obispo Counties	Oak woodland, grassland, slopes below 3,000 feet	Mar–May	High. Historic occurrence; insufficient data to determine whether plant still exists in HCP/NCCP inventory area; Covered Species
Hall’s bush mallow <i>Malacothamnus hallii</i>	-/-/1B		Alameda, Contra Costa, Merced, Santa Clara, and Stanislaus Counties	Chaparral and coastal scrub between 30–2,500 feet	May–Sep	Moderate. All Contra Costa County occurrences in Mt. Diablo State Park
Robust monardella <i>Monardella villosa</i> ssp. <i>globosa</i>	-/-/1B		North Coast Ranges and Eastern San Francisco Bay Area; Alameda, Contra Costa, Humboldt, Lake, Marin, Mendocino, Napa, San Mateo, and Sonoma Counties	Oak woodland and grassy openings in chaparral and coastal scrub	June–July	Moderate. No records from HCP/NCCP inventory area
Adobe navarretia <i>Navarretia nigelliformis</i> ssp. <i>nigelliformis</i>	-/-/-/		Sierra Nevada foothills, Central Valley, and inner South Coast Ranges	Heavy clay soils of vernal pools and other seasonally moist areas in grassland, 325–3,300 feet	Apr–May	High. Reported from the Los Vaqueros area
Antioch Dunes evening-primrose <i>Oenothera deltoides</i> ssp. <i>howellii</i>	E/E/1B		Northeast San Francisco Bay region, known from three native occurrences; Contra Costa and Sacramento Counties	Inland dunes generally below 330 feet	Mar–Sep	Low. Populations planted or in Antioch Dunes National Wildlife Refuge
Mount Diablo phacelia <i>Phacelia phacelioides</i>	SC/-/1B		South Coast Ranges from Contra Costa County to San Benito County	Chaparral, oak woodland, adjacent to trails, on rock outcrops and talus slopes, 2,000–3,000 feet	Apr–May	High. All Contra Costa County occurrences in Mt. Diablo State Park
Eel-grass pondweed <i>Potamogeton zosteriformis</i>	-/-/2		Southern inner north Coast Range, Central valley, Modoc plateau, Contra Costa, Lake, Lassen, Modoc, and Shasta Counties; Oregon, Utah, Washington and elsewhere	Assorted freshwater marshes, ponds, lakes and streambanks, below 4,270 feet	Jun–Jul	High. One occurrence in Delta close to project area

Common and Scientific Name	Legal Status <sup>a</sup>		Habitat Requirements	Blooming Period	Likelihood for Occurrence in Plan Area <sup>b</sup>
	Federal/State/ CNPS	California Distribution			
Rock sanicle <i>Sanicula saxatilis</i>	-/R/1B	Contra Costa and Santa Clara Counties	Bedrock outcrops and talus slopes in chaparral, valley and foothill grasslands and oak woodland, 2,000–4,100 feet	Apr–May	High. All Contra Costa County occurrences in Mt. Diablo State Park
Marsh skullcap <i>Scutellaria galericulata</i>	-/-/2	Northern high Sierra Nevada, Modoc plateau, El Dorado, Lassen, Modoc, Nevada, Placer, Plumas, Shasta, San Joaquin, and Siskiyou Counties; Oregon	Wet sites, mesic meadows, streambanks; coniferous forest between 330–6,900 feet	Jun–Sep	Low. Occurrences are in Delta
Blue skullcap <i>Scutellaria lateriflora</i>	-/-/2	Northern San Joaquin Valley, east of the Sierra Nevada, Inyo, and San Joaquin Counties; New Mexico, Oregon, and elsewhere	Mesic meadows, marshes and swamps, generally below 1,640 feet	Jul–Sep	Low. Occurrences are in Delta
Rayless ragwort <i>Senecio aphanactis</i>	-/-/2	Scattered locations in central western and southwestern California, from Alameda County to San Diego County	Oak woodland, coastal scrub, open sandy or rocky areas, on alkaline soils; 15–800 meters	Jan–Apr	High. Historic occurrences; insufficient data to determine whether plant still exists in HCP/NCCP inventory area
Most beautiful jewel-flower <i>Streptanthus albidus</i> ssp. <i>peramoenus</i>	-/-/1B	Eastern San Francisco Bay area, Central south coastal outer ranges; Alameda, Contra Costa, Monterey, and Santa Clara Counties	Chaparral, annual grassland, on ridges and slopes on serpentinite outcrops, 450–3,200 feet	Apr–Jun	High. All Contra Costa County occurrences in Mt. Diablo State Park
Mount Diablo jewel-flower <i>Streptanthus hispidus</i>	-/-/1B	Endemic to Mt. Diablo, Contra Costa County	Annual grassland, chaparral, on talus or rocky outcrops, 2,000–3,850 feet	Mar–Jun	High. All Contra Costa County occurrences in Mt. Diablo State Park
Moss <i>Triquetrella californica</i>	-/-/1B	Contra Costa, Mendocino, San Diego, and San Francisco Counties, also from Oregon	On soil in coastal bluff scrub and coastal scrub soil, 10–100 meters	N/A	Moderate. No information
Caper-fruited tropidocarpum <i>Tropidocarpum capparideum</i>	-/-/1A	Historically known from the northwest San Joaquin Valley and adjacent Coast Range foothills	Grasslands in alkaline hills below 1,500 feet	Mar–Apr	Moderate. Historic occurrences; insufficient data to determine whether plant still exists in HCP/NCCP inventory area; No-Take Species

Common and Scientific Name	Legal Status <sup>a</sup>		Habitat Requirements	Blooming Period	Likelihood for Occurrence in Plan Area <sup>b</sup>
	Federal/State/ CNPS	California Distribution			
Oval-leaved viburnum <i>Viburnum ellipticum</i>	-/-/2	Contra Costa, Fresno, El Dorado, Glenn, Humboldt, Mendocino, Napa, Shasta, Sonoma Counties; Oregon and Washington	Chaparral, cismontane woodland, and lower montane coniferous forest	May–Jun	High. Several occurrences close to southwestern portion of project area

Notes:

\* = known populations believed extirpated from that County

<sup>a</sup> Status explanations:

**Federal**

E = listed as endangered under the federal Endangered Species Act.

T = listed as threatened under the federal Endangered Species Act.

SC = species of concern; species for which existing information indicates it may warrant listing but for which substantial biological information to support a proposed rule is lacking.

– = no listing.

**State**

E = listed as endangered under the California Endangered Species Act.

T = listed as threatened under the California Endangered Species Act.

R = listed as rare under the California Native Plant Protection Act. This category is no longer used for newly listed plants, but some plants previously listed as rare retain this designation.

– = no listing.

**California Native Plant Society**

1A = List 1A species: presumed extinct in California.

1B = List 1B species: rare, threatened, or endangered in California and elsewhere.

2 = List 2 species: rare, threatened, or endangered in California but more common elsewhere.

3 = List 3 species: plants about which more information is needed to determine their status.

– = no listing.

<sup>b</sup> Likelihood for Occurrence in Plan Area

**Low:** The project site is within the species range and suitable habitat for the species occurs in the project vicinity, but was not identified in the project area.

**Medium:** The project site is within the species range and suitable habitat for the species is present at the project site, however there are no records for the species in the project vicinity.

**High:** The project site is within the species range and suitable habitat for the species is present at the project site, and there are one or more records of the species in the project vicinity or the species was observed at the project site or in the project vicinity.

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