Appendix D

Biological Resources

APPENDIX D BIOLOGICAL RESOURCES

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4.1 APPENDIX D-1 VEGETATION COMMUNITIES

Aggregated Vegetation Communities for Purposes of this EIR (Shaded) Modified Holland Vegetation Communities[1] (Unshaded)
Riparian and Wetlands
Beach/Coastal/Saltpan/Mudflats
21200 Foredunes
21230 Southern Foredunes
Marsh
46000 Alkali Playa Community
52120 Southern Coastal Salt Marsh
52300 Alkali Marsh
52310 Cismontane Alkali Marsh
52400 Freshwater Marsh
52410 Coastal and Valley Freshwater Marsh
52420 Transmontane Freshwater Marsh
52440 Emergent Wetland
Meadows and Seeps
45000 Meadow and Seep
45100 Montane Meadow
45110 Wet Montane Meadow
45120 Dry Montane Meadows
45300 Alkali Meadows and Seeps
45320 Alkali Seep
45400 Freshwater Seep
Open Water and Streams
64000 Unvegetated Habitat
64100 Open Water
64110 Marine
64111 Subtidal
64112 Intertidal
64121 Deep Bay
64122 Intermediate Bay
64123 Shallow Bay
64130 Estuarine
64131 Subtidal
64133 Brackish Water
64140 Freshwater
64200 Non-Vegetated Channel, Floodway

Aggregated Vegetation Communities for Purposes of this EIR (Shaded) Modified Holland Vegetation Communities[1] (Unshaded)
64300 Saltpan/Mudflats
64400 Beach
Riparian Forest/Woodland
60000 Riparian and Bottomland Habitat
61000 Riparian Forests
61300 Southern Riparian Forest
61310 Southern Coast Live Oak Riparian Forest
61320 Southern Arroyo Willow Riparian Forest
61330 Southern Cottonwood–Willow Riparian Forest
61510 White Alder Riparian Forest
61800 Colorado Riparian Forest
61810 Sonoran Cottonwood–Willow Riparian Forest
61820 Mesquite Bosque
62000 Riparian Woodlands
62200 Desert Dry Wash Woodland
62300 Desert Fan Palm Oasis Woodland
62400 Southern Sycamore–Alder Riparian Woodland
62500 Southern Riparian Woodland
Riparian Scrub
63000 Riparian Scrubs
63300 Southern Riparian Scrub
63310 Mule Fat Scrub
63320 Southern Willow Scrub
63321 Arundo Donax Dominant/Southern Willow Scrub
63400 Great Valley Scrub
63410 Great Valley Willow Scrub
63800 Colorado Riparian Scrub
63810 Tamarisk Scrub
63820 Arrowweed Scrub

Aggregated Vegetation Communities for Purposes of this EIR (Shaded) Modified Holland Vegetation Communities[1] (Unshaded)
Vernal Pools
44000 Vernal Pool
44320 San Diego Mesa Vernal Pool
44322 San Diego Mesa Claypan Vernal Pool
Chaparral
37000 Chaparral
37120 Southern Mixed Chaparral
37121 Granitic Southern Mixed Chaparral
37122 Mafic Southern Mixed Chaparral
37130 Northern Mixed Chaparral
37131 Granitic Northern Mixed Chaparral
37132 Mafic Northern Mixed Chaparral
37200 Chamise Chaparral
37210 Granitic Chamise Chaparral
37220 Mafic Chamise Chaparral
37300 Red Shank Chaparral (near Campo and Chihuahua Valley)
37400 Semi-Desert Chaparral
37500 Montane Chaparral
37510 Mixed Montane Chaparral
37520 Montane Manzanita Chaparral
37530 Montane Ceanothus Chaparral
37540 Montane Scrub Oak Chaparral
37800 Upper Sonoran Ceanothus Chaparral
37830 Ceanothus Crassifolius Chaparral
37900 Scrub Oak Chaparral
37A00 Interior Live Oak Chaparral
37C30 Southern Maritime Chaparral
Coastal Scrub
31200 Southern Coastal Bluff Scrub
32000 Coastal Scrub
32400 Maritime Succulent Scrub (Point Loma, etc.)
32500 Diegan Coastal Sage Scrub
32510 Coastal form
32520 Inland form (>1,000 ft. elevation)
32700 Riversidian Sage Scrub
32710 Riversidian Upland Sage Scrub
32720 Alluvial Fan Scrub
37G00 Coastal Sage-Chaparral Scrub Transition

Aggregated Vegetation Communities for Purposes of this EIR (Shaded) Modified Holland Vegetation Communities[1] (Unshaded)
37K00 Montane Buckwheat Scrub
Desert Dunes
22000 Desert Dunes
22100 Active Desert Dunes (very little in Borrego Valley)
22300 Stabilized and Partially-Stabilized Desert Sand Field
24000 Stabilized Alkaline Dunes
25000 Badlands/Mudhill Forbs
Desert Scrub
33000 Sonoran Desert Scrub
33100 Sonoran Creosote Bush Scrub
33200 Sonoran Desert Mixed Scrub
33210 Sonoran Mixed Woody Scrub
33220 Sonoran Mixed Woody and Succulent Scrub
33230 Sonoran Wash Scrub
33300 Colorado Desert Wash Scrub
33600 Encelia Scrub
33700 Acacia Scrub
34000 Mojavean Desert Scrub
34300 Blackbush Scrub
3500 Great Basin Scrub
35200 Sagebrush Scrub
35210 Big Sagebrush Scrub
36110 Desert Saltbush Scrub
36120 Desert Sink Scrub
39000 Upper Sonoran Subshrub Scrub
Oak Woodland
71100 Oak Woodland
71120 Black Oak Woodland (Cuyamaca and Mesa Grande)
71160 Coast Live Oak Woodland
71161 Open Coast Live Oak Woodland
71162 Dense Coast Live Oak Woodland
71180 Engelmann Oak Woodland
71181 Open Engelmann Oak Woodland
71182 Dense Engelmann Oak Woodland
77000 Mixed Oak Woodland
81300 Oak Forest
81310 Coast Live Oak Forest
81320 Canyon Live Oak Forest

Aggregated Vegetation Communities for Purposes of this EIR (Shaded) Modified Holland Vegetation Communities[1] (Unshaded)
81340 Black Oak Forest
Forest/Woodland
7000 Woodland
71000 Cismontane Woodland
72300 Peninsular Pinon and Juniper Woodlands
72310 Peninsular Pinon Woodland
72320 Peninsular Juniper Woodland and Scrub
75100 Elephant Tree Woodland
78000 Undifferentiated Open Woodland
79000 Undifferentiated Dense Woodland
79100 Eucalyptus Woodland
81100 Mixed Evergreen Forest
83140 Torrey Pine Forest
83230 Southern Interior Cypress Forest
84000 Lower Montane Coniferous Forest
84100 Coast Range, Klamath and Peninsular Coniferous Forest
84140 Coulter Pine Forest
84150 Bigcone Spruce (Bigcone Douglas Fir)–Canyon Oak Forest
84230 Sierran Mixed Coniferous Forest
84500 Mixed Oak/Coniferous/Bigcone/Coulter
85100 Jeffrey Pine Forest
Grasslands
42000 Valley and Foothill Grassland
42100 Native Grassland
42110 Valley Needlegrass Grassland
42120 Valley Sacaton Grassland
42200 Nonnative Grassland
42210 Nonnative Grassland: Broadleaf-Dominated
42300 Wildflower Field
42400 Foothill/Mountain Perennial Grassland
42470 Transmontane Dropseed Grassland
Other Cover Types
Agriculture
18000 General Agriculture
18100 Orchards and Vineyards
18200 Intensive Agriculture – Dairies, Nurseries, Chicken Ranches
18300 Extensive Agriculture – Field/Pasture, Row Crops
18310 Field/Pasture

Aggregated Vegetation Communities for Purposes of this EIR (Shaded) Modified Holland Vegetation Communities[1] (Unshaded)
18320 Row Crops
Disturbed Habitat
11000 Nonnative Vegetation
11200 Disturbed Wetland
11300 Disturbed Habitat
Urban/Developed
12000 Urban/Developed

[1] Based on Vegetation Communities from County of San Diego 2017.

4.2 APPENDIX D-2 SENSITIVE PLANT SPECIES

Species[1]	State/Federal Status[2]	CRPR List/Code[2]	Regional HCP/NCCP Coverage[3]	Habitat
Abronia maritima red sand-verbena	--/--	4.2	–	Coastal dunes. Elevation range 0–10 meters (m).
Abronia villosa var. *aurita* chaparral sand-verbena	--/--	1B.1	–	Chaparral, coastal scrub, desert dunes. Elevation range 80–1,600 m.
Acanthomintha ilicifolia San Diego thorn-mint	FT/SE	1B.1	NE, MSCP (covered in all approved MSCP Subarea Plans	Chaparral, coastal sage scrub, valley and foothill grassland, vernal pools. Found in clay soils. Elevation range below 1,000 m.
Acmispon haydonii pygmy lotus	--/--	1B.3	–	Creosote bush scrub to pinyon–juniper woodland; rocky sites. Elevation range 600–1,200 m.
Acmispon prostratus Nuttall's acmispon	--/--	1B.1	MSCP (covered in all approved MSCP Subarea Plans except Poway)	*Lotus nuttallinaus* (Nuttall's lotus) is now considered a synonym of this species (Jepson Flora Project 2013). Coastal scrub, beaches, and disturbed areas. Elevation range 0–30 m.
Adolphia californica California adolphia	--/--	2B.1	–	Coastal sage scrub, chaparral, valley and foothill grassland. Found in sandy/gravelly to clay soils. Elevation range below 400 m.
Agave shawii Shaw's agave	--/	2B.1	NE, MSCP (covered in all approved MSCP Subarea Plans except for Poway)	Coastal scrub, maritime succulent scrub, coastal bluff scrub. Has also been found adjacent to Torrey Pine forest. Elevation range below 300 m.
Ambrosia chenopodiifolia San Diego bur-sage	--/--	2B.1	–	Coastal sage scrub, maritime succulent scrub. Found on slopes of canyons in open succulent scrub, usually with little herbaceous cover. Elevation range 55–150 m.
Ambrosia monogyra singlewhorl burrobrush	--/--	2B.2	–	Coastal scrub, maritime succulent scrub, chaparral, Sonoran desert scrub. Elevation range 10–500 m.
Ambrosia pumila San Diego ambrosia (= San Diego ragweed)	FE	1B.1	NE, MSCP (covered in all approved MSCP Subarea Plans except for Poway)	Coastal sage scrub, valley and foothill grassland. Found in sandy loam of clay soil. In valleys; persists where disturbance has been superficial. Elevation range 20– 415 m.
Androsace elongata ssp. *acuta* California androsace	--/--	4.2	–	Chaparral, cismontane woodland, coastal scrub, meadows and seeps, pinyon–juniper woodland, valley and foothill grassland. Elevation range 150–1,200 m.
Aphanisma blitoides aphanisma	--/--	1B.2	MSCP	Coastal scrub, coastal bluff scrub, alkaline areas, coastal dunes. Found on bluffs and slopes near the ocean in sandy or clay soils. In steep decline on the islands and the mainland. Elevation range 1–305 m.

Species[1]	State/Federal Status[2]	CRPR List/Code[2]	Regional HCP/NCCP Coverage[3]	Habitat
Arctostaphylos glandulosa ssp. *crassifolia* Del Mar manzanita	FE	1B.1	MSCP (covered in all approved MSCP Subarea Plans except for Poway)	Coastal chaparral, closed-coned coniferous forest. Found onsandy coastal mesas and ocean bluffs; in chaparral or Torrey pine forest. Elevation range 0–365 m.
Arctostaphylos otayensis Otay manzanita	--/--	1B.2	MSCP (covered in all approved MSCP Subarea Plans except for Poway)	Chaparral, cismontane woodland. Found in metavolcanic soils with other chaparral associates. Elevation range 275–1,700 m.
Arctostaphylos rainbowensis Rainbow manzanita	--/--	1B.1	–	Chaparral. Usually found in gabbro chaparral in Riverside and San Diego counties. Elevation range 270–790 m.
Artemisia palmeri San Diego sagewort	--/--	4.2	–	Chaparral, coastal scrub, riparian forest, riparian scrub, riparian woodland. Sandy, mesic soils. Elevation range 15–915 m.
Asplenium vespertinum western spleenwort	--/--	4.2	–	Chaparral, cismontane woodland, coastal scrub/rocky. Elevation range 180–1,000 m.
Astragalus crotalariae Salton milk-vetch	--/--	4.3	–	Sonoran desert scrub (sandy or gravelly). Elevation range 0–250 m.
Astragalusdeanei Dean's milk-vetch	--/--	1B.1	–	Chaparral, coastal scrub, riparian forest. Found on open, brushy south- facing slopes in Diegan coastal sage, sometimes on recently burned-over hillsides. Elevation range 75–670 m.
Astragalus douglasii var. *perstrictus* Jacumba milk-vetch	--/--	1B.2	–	Chaparral, cismontane woodland, valley and foothill grassland. Found on stony hillsides and gravelly or sandy flats in open oak woodland. Elevation range 900–1,370 m.
Astragalus insularis var. *harwoodii* Harwood's milk-vetch	--/--	2B.2	–	Desert dunes, creosote bush scrub. Found in open sandy flats or stony desert washes; mostly in creosote bush scrub. Elevation range (-50)–500 m.
Astragalus lentiginosus var. *borreganus* Borrego milk-vetch	--/--	4.3	–	Mojavean desert scrub, Sonoran desert scrub/sandy. Elevation range 30–270 m.
Astragalus magdalenae var. *peirsonii* Peirson's milk-vetch	FT/SE	1B.2	–	Sand dune and sandy areas. Elevation range 50–250 m.
Astragalus nutans Providence Mountains milk-vetch	--/--	4.3	–	Joshua tree woodland, Mojavean desert scrub, pinyon– juniper woodland, Sonoran desert scrub/sandy or gravelly. Elevation range 450–1,950 m.
Astragalus oocarpus San Diego milk-vetch	--/--	1B.2	–	Chaparral, cismontane woodland, meadows. Found in openings in chaparral or on gravelly flats and slopes in thin oak woodland. Elevation range 305–1,500 m.

Species[1]	State/Federal Status[2]	CRPR List/Code[2]	Regional HCP/NCCP Coverage[3]	Habitat
Astragalus pachypus var. *jaegeri* Jaeger's milk-vetch	--/--	1B.1	–	Coastal scrub, chaparral, valley and foothill grassland, cismontane woodland. Found on dry ridges, in valleys and on open sandy slopes; often in grassland and oak- chaparral. Elevation range 365–915 m.
Astragalus sabulonum gravel milk-vetch	–	2B.2	–	Desert sands to gravel. Elevation range 50–900 m.
Astragalus tener var. *titi* coastal dunes milk-vetch	FE/SE	1B.1	MSCP (covered in all approved MSCP Subarea Plans except for Poway)	Coastal bluff scrub, coastal dunes. Found in moist, sandy depressions of bluffs or dunes along and near the Pacific Ocean; one recorded occurrence on a clay terrace. Elevation range 1–50 m.
Atriplex coulteri Coulter's saltbush	--/--	1B.2	–	Coastal bluff scrub, coastal dunes, coastal scrub, valley and foothill grassland. Found on ocean bluffs and ridge tops, as well as alkaline low places. Elevation range 10– 440 m.
Atriplex pacifica South Coast saltscale	--/--	1B.2	–	Coastal scrub, Diegan sage scrub, coastal bluff scrub, chenopod. Found in alkaline soils. Elevation range 1– 500 m.
Atriplex parishii Parish's brittlescale	--/--	1B.1	–	Alkali meadows, vernal pools, chenopod scrub, playas. Usually found on drying alkali flats with fine soils. Elevation range 4–140 m.
Atriplex serenana var. *davidsonii* Davidson's saltscale	--/--	1B.2	–	Coastal scrub, coastal bluff scrub. Found in alkaline soils. Elevation range 3–250 m.
Ayenia compacta California ayenia	--/--	2B.3	–	Mojavean desert scrub, Sonoran desert scrub. Found in sandy and gravelly washes in the desert; also found in dry desert canyons. Elevation range 150–1,095 m.
Azolla microphylla Mexican mosquito fern	--/--	4.2	–	Marshes and swamps. Elevation range 30–100 m.
Baccharis vanessae Encinitas baccharis	FT/SE	1B.1	NE, MSCP (covered in all approved MSCP Subarea Plans), MHCP, Carlsbad HMP	Chaparral. Found on sandstone soils in steep, open, rocky areas with chaparral associates. Elevation range 60–720 m.
Berberis fremontii Fremont barberry	--/--	2B.3	–	Chaparral, pinyon–juniper woodland, Joshua tree woodland. Found on dry, rocky points and slopes. Elevation range 840–1,850 m.
Berberis higginsiae Fremont's mahonia (= Higgen's barberry)	--/--	3.2	–	Rocky slopes, pinyon–juniper woodland or chaparral areas. Elevation range 700–1,900 m.
Berberis nevinii Nevin's barberry	FE/SE	1B.1	NE, MSCP (covered in all approved MSCP Subarea Plans except Poway)	Chaparral, cismontane woodland, coastal scrub, riparian scrub. Found on steep, north-facing slopes or in low- grade sandy washes. Elevation range 290–1,575 m.

Species[1]	State/Federal Status[2]	CRPR List/Code[2]	Regional HCP/NCCP Coverage[3]	Habitat
Bergerocactus emoryi golden-spined cereus	--/--	2B.2	–	Coastal scrub, sometimes chaparral margins. Limited to the coastal belt. Usually found in clay soils. Elevation range 3–395 m.
Bloomeriaclevelandii San Diego goldenstar	--/--	1B.1	MSCP (covered in all approved MSCP Subarea Plans)	*Muilla c.* is now considered a synonym of this species (Baldwin 2012). Chaparral, coastal sage scrub, valley and foothill grassland, vernal pools, mesa grasslands, scrub edges; clay soils. Often on mounds between vernal pools in fine, sandy loam. Elevation range 50–1,090 m.
Boecherahirshbergiae Hirshberg's rock cress	--/--	1B.2	–	Pebble (or pavement) plains. Known occurrence at elevation of 1,400 m.
Brodiaea filifolia thread-leaved brodiaea	FT/SE	1B.1	NE, MSCP (covered in all approved MSCP Subarea Plans except for Poway), MHCP, Carlsbad HMP	Cismontane woodland, coastal scrub, playas, valley and foothill grassland, vernal pools. Usually associated with annual grassland and vernal pools; often surrounded by shrubland habitats. Found in clay soils. Elevation range 25–860 m.
Brodiaea orcuttii Orcutt's brodiaea	--/--	1B.1	NE, MSCP (covered in all approved MSCP Subarea Plans), MHCP, Carlsbad HPM	Closed-cone coniferous forest, meadows, cismontane woodland, chaparral, valley and foothill grassland, vernal pools. Found in mesic, clay soils; sometimes serpentine; usually in vernal pools and small drainages. Elevation range 30–165 m.
Brodiaea santarosae Santa rosa Basalt brodiaea	--/--	1B.2	–	Valley and foothill grassland/basaltic. Elevation range 580–1,045 m.
Bursera microphylla little-leaf elephant tree	--/--	2B.3	–	Sonoran desert scrub. Found on hillsides, in washes, and on canyon sides in California; rocky sites. Elevation range 200–700 m.
Calamagrostis koelerioides (Calamagrostis densa) dense reed grass	--/--		MSCP (covered in all approved MSCP Subarea Plans except Poway)	Dry slopes. Associated with chaparral habitats. Elevation range 20–2,450 m.
Calandrinia breweri Brewer's calandrinia	--/--	4.2	–	Chaparral, coastal scrub/sandy or loamy, disturbed sites and burns. Elevation range 10–1,220 m
California macrophylla [Atriplex flavida] round-leaved filaree	--/--	1B.3	–	Cismontane woodland, valley and foothill grassland. Found in clay soils. Elevation range 15–1,200 m.
Calliandra eriophylla pink fairy-duster	--/--	2B.3	–	Sonoran desert scrub. Found in sandy or rocky sites in the desert. Elevation range 120–1,500 m.
Calochortuscatalinae Catalina mariposa lily	--/--	4.2	–	Found in heavy soils in open grassland or scrub. Elevation range 1–700 m.

Species[1]	State/Federal Status[2]	CRPR List/Code[2]	Regional HCP/NCCP Coverage[3]	Habitat
Calochortus dunnii Dunn's mariposa lily	SR	1B.2	NE, MSCP (covered in all approved MSCP Subarea Plans except for Poway)	Closed-cone coniferous forest, chaparral. Found in gabbro or metavolcanic soils; also known from sandstone; often associated with chaparral. Elevation range 375–1,830 m.
Camissoniopsis lewisii Lewis' evening-primrose	--/--	3	–	Coastal bluff scrub, cismontane woodland, coastal dunes, coastal scrub, valley and foothill grassland/sandy or clay. Elevation range 0–300 m.
Carex obispoensis San Luis Obispo sedge	--/--	1B.2	–	Closed-cone coniferous forest, chaparral, coastal prairie, coastal scrub, valley and foothill grassland/often serpentinite seeps, sometimes gabbro; often on clay soils. Elevation range 10–790 m.
Carlowrightia arizonica Arizona carlowrightia	--/--	2B.2	–	Sonoran desert scrub. Found in sandy, granitic alluvium, associated with palm oasis in California. Elevation range 285–350 m.
Castilleja lasiorhyncha San Bernardino Mountains owl's-clover	--/--	1B.2	–	Meadows, flats, and open forest. Elevation Range 1,000– 2,400 m.
Caulanthus simulans Payson's jewel-flower	--/--	4.2	-	Chaparral, coastal scrub/sandy, granitic. Elevation range 90–2,200 m.
Ceanothus cyaneus Lakeside ceanothus	--/--	1B.2	NE, MSCP (covered in all approved MSCP Subarea Plans)	Closed-cone coniferous forest, chaparral. Elevation range 100–1,515 m.
Ceanothus otayensis Otay Mountain ceanothus	--/--	1B.2	–	Chaparral in metavolcanic or gabbroic soils. Elevation range 600–1,100 m.
Ceanothus verrucosus wart-stemmed ceanothus	--/--	2B.2	MSCP (covered in all approved MSCP Subarea Plans except for Poway)	Chaparral. Elevation range 1–380 m.
Centromadia parryi ssp. *australis* southern tarplant	--/	1B.1	–	Marshes and swamps (margins), vernal pools, valley and foothill grasslands, alkaline locales, salt marshes. Elevation range 0–640 m.
Centromadia pungens ssp. *laevis* smooth tarplant	--/--	1B.1	–	Valley and foothill grassland, chenopod scrub, meadows, playas, riparian woodland. Found in alkali meadow, alkali scrub, also in disturbed places. Elevation range 0–480 m.
Chaenactis carphoclinia var. *peirsonii* Peirson's pincushion	--/--	1B.3	–	Sonoran desert scrub. Found on open rocky or sandy sites. Elevation range 3–80 m.
Chaenactis glabriuscula var. *orcuttiana* Orcutt's pincushion	--/--	1B.1	–	Coastal bluff scrub, coastal dunes. Found on sandy sites. Elevation range 3–100 m.

Species[1]	State/Federal Status[2]	CRPR List/Code[2]	Regional HCP/NCCP Coverage[3]	Habitat
Chaenactisparishii Parish's chaenactis	--/--	1B.3	–	Chaparral. Found on rocky sites. Elevation range 1,300– 2,500 m.
Chamaebatia australis southern mountain misery	--/--	4.2	–	Chaparral (gabbroic or metavolcanic). Elevation range 300–780 m.
Chamaesyce abramsiana = Euphorbia abramsiana Abram's spurge	--/--	2B.2	–	Mojave desert scrub, Sonoran desert scrub/sandy. Elevation range 0–915 m.
Chamaesyce arizonica = Euphorbia arizonica Arizona spurge	--/--	2B.3	–	Sonoran desert scrub. Found in sandy soils. Elevation range 50–300 m.
Chamaesyce platysperma = Euphorbia platysperma flat-seeded spurge	--/--	1B.2	–	Sonoran desert scrub, desert dunes. Found in sandy places or shifting dunes. Possibly a waif in California; more common in Arizona and Mexico. Elevation range 60–950 m.
Chamaesyce revoluta = Euphorbia revoluta revolute spurge	--/--	4.3	–	Mojavean desert scrub in rocky areas. Elevation range 1,095–3,100 m.
Chloropyron maritimum ssp. *maritimum* salt marsh bird's-beak	FE/SE	1B.2	MSCP (covered in all approved MSCP Subarea Plans except for Poway)	Formally *Cordylanthus maritimus* ssp. *maritimus* (Jepson Flora Project 2013). Coastal salt marsh, coastal dunes. Limited to the higher zones of the salt marsh habitat. Elevation range 0–30 m.
Chorizantheleptotheca Peninsular spineflower	--/--	4.2	–	Chaparral, coastal scrub, lower montane coniferous forest/alluvial fan, granitic soils. Elevation range 300– 1,900 m.
Chorizanthe orcuttiana Orcutt's spineflower	FE/SE	1B.1	NE, MHCP, Carlsbad HMP	Coastal scrub, chaparral, closed-cone coniferous forest. Found from Del Mar to Point Loma, in San Diego County. Found in sandy sites and openings; sometimes in transition zones. Elevation range 3–125 m.
Chorizanthe polygonoides var. *longispina* long-spined spineflower	--/--	1B.2	–	Chaparral, coastal scrub, meadows, valley and foothill grassland. Found in gabbroic clay. Elevation range 30– 1,450 m.
Chorizanthe xanti var. *leucotheca* white-bracted spineflower	--/--	1B.2	–	Mojavean desert scrub, pinyon–juniper woodland/sandy or gravelly. Elevation range 300–1,200 m.
Cistanthe maritima seaside calandrinia (= seaside cistanthe)	--/--	4.2	–	Coastal bluff scrub, coastal scrub, valley and foothill grassland/sandy. Elevation range 5–300 m.

Species[1]	State/Federal Status[2]	CRPR List/Code[2]	Regional HCP/NCCP Coverage[3]	Habitat
Clarkia delicata delicate clarkia	--/--	1B.2	–	Cismontane woodland, chaparral. Elevation range 235– 1,000 m.
Clinopodium chandleri San Miguel savory	--/--	1B.2	MSCP (covered in all approved MSCP Subarea Plans except Poway)	Chaparral, Cismontane woodland, coastal scrub, riparian woodland, valley and foothill grassland. Rocky, gabbroic or metavolcanic substrate. Elevation range 120–1,005 m.
Colubrina californica Las Animas colubrina	--/--	2B.3	–	Mojavean desert scrub. Found on narrow, steep, rocky ravines or washes. Elevation range 10–1000 m.
Comarostaphylis diversifolia ssp. *diversifolia* summer holly	--/--	1B.2	MSCP (Poway MSCP Subarea Plan only)	Chaparral. Often found in mixed chaparral in California, sometimes post-burn. Elevation range 30–550 m.
Convolvulus simulans small-flowered morning-glory	--/--	4.2	–	In chaparral open areas, coastal scrub, valley and foothill grassland/clay, serpentinite seeps. Elevation range 30– 700 m.
Cordylanthus parviflorus small-flowered bird's-beak	--/--	2B.3	–	Dry sagebrush scrub, pinyon–juniper and Joshua-tree woodland. Elevation range 700–2,200 m.
Corethrogyne filaginifolia var. *incana* San Diego sand aster	--/--	1B.1	–	Coastal scrub, coastal bluff scrub, chaparral. *C. f.* var. *i.* is now considered a synonym of *C. f.* var. *f.* (Baldwin 2012) and is therefore no longer considered sensitive.
Corethrogyne filaginifolia var. *linifolia* Del Mar Mesa sand aster	--/--	1B.1	MSCP (covered in all approved MSCP Subarea Plans except for Poway), Carlsbad HMP	Chaparral, coastal scrub. *C. f.* var. *l.* is now considered a synonym of *C. f.* var. *f.* (Baldwin 2012) and is therefore no longer considered sensitive.
Cryptantha costata [Johnstonella costata] ribbed cryptantha	--/--	4.3	–	Desert dunes, Mojavean desert scrub, Sonoran desert scrub/sandy. Elevation range 0–500 m.
Cryptantha ganderi Gander's cryptantha	--/--	1B.1	–	Sonoran desert scrub, desert dunes. Found on dunes and in washes. Elevation range 170–400 m.
Cryptantha holoptera [Johnstonella holoptera] winged cryptantha	--/--	4.3	–	Mojavean desert scrub, Sonoran desert scrub. Elevation range 100–1,690 m.
Cryptantha wigginsii Wiggins' cryptantha	--/--	1B.2	–	This is a recently rediscovered species (Simpson et al. 2013). Closed mixed coastal succulent scrub community, maritime succulent scrub, or coastal sage scrub. Elevation range 6–274 m.
Cylindropuntia californica var. *californica* snake cholla	--/--	1B.1	NE, MSCP (covered in all approved MSCP Subarea Plans except for Poway)	Chaparral, coastal scrub. Elevation range 30–150 m.

Species[1]	State/Federal Status[2]	CRPR List/Code[2]	Regional HCP/NCCP Coverage[3]	Habitat
Cylindropuntia fosbergii pink teddy-bear cholla	--/--	1B.1	–	Sonoran desert scrub. Elevation range 85–850 m.
Cylindropuntia wolfii Wolf's cholla	--/--	4.3	–	Sonoran desert scrub. Elevation range 100–1,200 m.
Deinandra conjugens Otay tarplant	FT/SE	1B.1	NE, MSCP (covered in all approved MSCP Subarea Plans except for Poway)	Coastal scrub, valley and foothill grassland. Found on coastal plains, mesas, and river bottoms; often in open, disturbed areas; claysoils. Elevation range 25–300 m.
Deinandra floribunda Tecate tarplant	--/--	1B.2	–	Chaparral, coastal scrub. Often in little drainages or disturbed areas. Elevation range 70–1,220 m.
Deinandra mohavensis Mojave tarplant	SE	1B.3	–	Riparian scrub, chaparral. Found in low sand bars in riverbeds; mostly in riparian areas or ephemeral grassy areas. Elevation range 850–1,600 m.
Deinandra paniculata paniculate tarplant	--/--	4.2	–	Coastal scrub, valley and foothill grassland, vernal pools/usually vernally mesic. Elevation range 25–940 m.
Delphinium hesperium ssp. *cuyamacae* Cuyamaca larkspur	SR	1B.2	–	Lower montane coniferous forest, meadows. Found on dried edge of grassy meadows, also described as in mesic sites. Elevation range 1,210–1,630 m.
Delphinium parishii ssp. *subglobosum* Colorado desert larkspur	--/--	4.3	–	Chaparral, cismontane woodland, pinyon–juniper woodland, Sonoran desert scrub. Elevation range 600– 1,800 m.
Dichondra occidentalis western dichondra	--/--	4.2	–	Chaparral, cismontane woodland, coastal scrub, valley and foothill grassland. Elevation range 50–500 m.
Dicranostegia orcuttiana Orcutt's bird's-beak	--/--	2B.1	MSCP (covered in all approved MSCP Subarea Plans except for Poway)	Coastal scrub. Found in coastal scrub associations on slopes; also reported from intermittently moist swales, and in washes. Elevation range 100–200 m.
Dieteria asteroides var. *lagunensis* Mount Laguna aster	SR	2B.1	–	Cismontane woodland, lower montane coniferous forest. Found in openings in woodland or forest. Elevation range 800–2,400 m.
Digitaria californica var. *californica* Arizona cottontop	--/--	2B.3	–	Mojavean desert scrub, Sonoran desert scrub/rocky. Elevation range290–1,490 m.
Ditaxis serrata var. *californica* California ditaxis	--/--	3.2	–	Sonoran desert scrub. Elevation range 30–1,000 m.

Species[1]	State/Federal Status[2]	CRPR List/Code[2]	Regional HCP/NCCP Coverage[3]	Habitat
Downingia concolor var. *brevior* Cuyamaca Lake downingia	SE	1B.1	–	Meadows (mesic), vernal pools. Found on shores of Cuyamaca Lake in San Diego County. Located in vernal seeps, lakes, and pools, and on mudflats, with *Orthocarpus*, *Limnanthes*, and *Collinsia*. Elevation range 1,400–1,500 m.
Dudleyaalainae Banner dudleya	--/--	3.2	–	Desert mountains, rocky, shaded slopes. Possible hybrid; needs further study. Elevation range 240–1,700 m.
Dudleya attenuata ssp. *attenuata* Orcutt's dudleya	--/--	2B.1	–	Coastal scrub, coastal bluff scrub, chaparral. Found on rocky mesas, canyons, and ridges. Elevation range 3– 50 m.
Dudleya blochmaniae ssp. *blochmaniae* Blochman's dudleya	FSC	1B.1	NE, MHCP, Carlsbad HMP	Coastal scrub, coastal bluff scrub, valley and foothill grassland. Found on open, rocky slopes; often in shallow clays over serpentine or in rocky areas with little soil. Elevation range 5–450 m.
Dudleya brevifolia short-leaved dudleya	SE	1B.1	NE, MSCP(covered in all approved MSCP Subarea Plans except Poway)	Chaparral, coastal scrub. Found on Torrey sandstone soils; in pebbly openings. Elevation range 30–250 m.
Dudleya multicaulis many-stemmed dudleya	--/--	1B.2	–	Chaparral, coastal scrub, valley and foothill grassland. Found in heavy, often clayey soils or grassy slopes. Elevation range 0–790 m.
Dudleya variegata variegated dudleya	--/--	1B.2	NE, MSCP (covered in all approved MSCP Subarea Plans except Poway)	Chaparral, coastal scrub, cismontane woodland, valley and foothill grassland, vernal pools. Found in rocky or clay soils; sometimes associated with vernal pool margins. Elevation range 3–550 m.
Dudleya viscida sticky dudleya	--/FSC	1B.2	MSCP (covered in all approved MSCP Subarea Plans except for Poway)	Coastal scrub, coastal bluff scrub, chaparral. Found on north and south-facing cliffs and banks. Elevation range 10–550 m.
Eriastrum harwoodii Harwood's woollystar (= Harwood's eriastrum)	--/--	1B.2	–	Desert dunes. Elevation range 200–915 m.
Ericameria cuneata var. *macrocephala* Laguna Mountains goldenbush	--/--	1B.3	–	Chaparral. Endemic to the Laguna Mountains. Found among boulders; in crevices in granitic outcrops and in rocky soil. Elevation range 1,185–1,850 m.
Ericameria palmeri ssp. *palmeri* Palmer's goldenbush	--/--	1B.1	NE, MSCP (covered in all approved MSCP Subarea Plans)	Coastal scrub, chaparral. Found on granitic soils, on steep hillsides. Elevation range 100–600 m.
Eriogonum evanidum vanishing wild buckwheat	--/--	1B.1	–	Sandy areas. Elevation range 1,100–2,100 m.

Species[1]	State/Federal Status[2]	CRPR List/Code[2]	Regional HCP/NCCP Coverage[3]	Habitat
Eryngium aristulatum var. *hooveri* Hoover's button-celery	--/--	1B.1	–	Vernal pools, seasonal wetlands, occasionally alkaline soils. Elevation range less than 50 m.
Eryngium aristulatum var. *parishii* San Diego button-celery	FE/SE	1B.1	MSCP NE (covered in all approved MSCP and MHCP Subarea Plans except Poway, and in the VPHCP)	Vernal pools, coastal scrub, valley and foothill grassland. Found on San Diego mesa hardpan and claypan vernal pools, and in southern interior basalt flow vernal pools; usually surrounded by scrub. Elevation range 15–620 m.
Eryngiumpendletonense Pendleton button-celery	--/--	1B.1	–	Coastal scrub, valley and foothill grassland, vernal pools. Located in vernally mesic sites. Elevation range 15–110 m.
Erysimum ammophilum coast wallflower (= sand-loving wallflower)	--/--	1B.2	MSCP (covered in all approved MSCP Subarea Plans except Poway)	Coastal dunes, bluff scrub. Elevation range 0–60 m.
Eucnide rupestris rock nettle (= annual rock nettle)	--/--	2B.2	–	Sonoran desert scrub. Elevation range 500–600 m.
Euphorbia misera cliff spurge	--/--	2B.2	MHCP	Coastal scrub, coastal bluff scrub. Found on rocky sites. Elevation range 10–500 m.
Ferocactus viridescens San Diego barrel cactus	--/FSC	2B.1	MSCP (covered in all approved MSCP Subarea Plans)	Chaparral, Diegan coastal scrub, valley and foothill grassland. Often on exposed, level, or south-sloping areas; often in coastal scrub nearcrest of slopes. Elevation range 3–485 m.
Frankenia palmeri Palmer's frankenia	--/--	2B.1	–	Coastal dunes, marshes (coastal salt), playas. Elevation range 0–10 m.
Fraxinus parryi chaparral ash	--/--	2B.2	–	Chaparral. Elevation range 213–620 m.
Fremontodendron mexicanum Mexican flannelbush	FE/SR	1B.1	–	Closed-cone coniferous forest, chaparral, cismontane woodland. Usually scattered along the borders of creeks or in dry canyons; sometimes on gabbro soils. Elevation range 10–490 m.
Funastrum utahense Utah vine milkweed	--/--	4.2	–	Mojavean desert scrub, Sonoran desert scrub. Sandy or gravelly soils. Elevation range 150–1,435 m.
Galium angustifolium ssp. *borregoense* Borrego bedstraw	SR	1B.3	–	Sonoran desert scrub. Found on steep walls and (usually north-facing) slopes in rocky watersheds or canyons. Elevation range 350–1,100 m.
Galium angustifolium ssp. *jacinticum* San Jacinto Mountains bedstraw	--/--	1B.3	–	Lower montane coniferous forest. Elevation range 1,350– 2,100 m.

Species[1]	State/Federal Status[2]	CRPR List/Code[2]	Regional HCP/NCCP Coverage[3]	Habitat
Galium johnstonii Johnston's bedstraw	--/--	4.3	–	Open mixed forest. Elevation range 1,650–2,300 m.
Galium proliferum desert bedstraw	--/--	2B.2	–	Joshua tree woodland, Mojavean desert scrub, pinyon– juniper woodland/rocky, carbonate (limestone). Elevation range 1,190–1,570 m.
Gentiana fremontii Fremont's gentian	--/--	2B.3	–	Wet mountain meadows. Elevation range 2,400–2,700 m.
Geothallustuberosus Campbell's liverwort	--/--	1B.1	–	Coastal scrub, vernal pools. Elevation range 10–600 m.
Geraea viscida sticky geraea	--/--	2B.2	–	Chaparral. Loamy coarse sand to gravelly sand soils; often In post- burned areas and in bulldozed areas. Elevation range450–1,700 m.
Gilia mexicana El Paso gilia	--/--	2B.3	–	Desert mountains; one occurrence recorded at Whale Peak. Elevation range 1,000–1,475 m.
Githopsis diffusa ssp. *filicaulis* Mission Canyon bluecup	--/--	3.1	–	Chaparral. Elevation range 450–700 m.
Grindelia hallii San Diego gumplant	--/--	1B.2	–	Meadows, valley and foothill grassland, chaparral, lower montane coniferous forest. Elevation range 180–1,660 m.
Harpagonella palmeri Palmer's grapplinghook	--/--	4.2	–	Chaparral, coastal scrub, valley and foothill grassland/clay. Elevation range 20–955 m.
Hazardia orcuttii Orcutt's hazardia	FSC/FC/ST	1B.1	NE, MHCP	Chaparral, coastal scrub, often on clay; in grassy edges of chaparral and coastal scrub. Elevation range 0–85 m.
Helianthus niveus ssp. *tephrodes* Algodones Dunes sunflower	SE	1B.2	–	Desert dunes. Elevation range 50–100m.
Herissantia crispa curly herissantia	--/--	2B.3	–	Sonoran desert scrub. Elevation range 700–725 m.
Hesperevax caulescens hogwallow starfish	--/--	4.2	–	Drying shrink-swell clay of vernal pools, flats, steep slopes, occasionally in serpentine soils. Elevation range 0–500 m.
Hesperocyparis forbesii Tecate cypress	--/--	1B.1	MSCP (covered in approved MSCP Subarea Plans except Poway)	Closed-cone coniferous forest, chaparral. Primarily on north-facing slopes; groves often associated with chaparral. Elevation range 250–1,500 m.
Hesperocyparis stephensonii Cuyamaca cypress	--/--	1B.1	–	Closed-cone coniferous forest, chaparral, riparian forest. Restricted to the southwest slopes of Cuyamaca Peak, on gabbroic rock. Elevation range 1,030–1,420 m.

Species[1]	State/Federal Status[2]	CRPR List/Code[2]	Regional HCP/NCCP Coverage[3]	Habitat
Heterotheca sessiliflora ssp. *sessiliflora* beach goldenaster	--/--	1B.1	–	Coastal chaparral, coastal dunes, coastal scrub. Elevation range 0–1,225 m.
Heuchera brevistaminea Laguna Mountains alumroot	--/--	1B.3	–	Broadleaved upland forest, chaparral, cismontane woodland, riparian forest, steep, rocky slopes. Elevation range 1,360–2,000 m.
Heuchera rubescens var. *versicolor* San Diego County alumroot	--/--	3.3	–	Chaparral, lower montane coniferous forest rocky outcrops. Elevation range 1,500–4,000 m.
Holocarpha virgata ssp. *elongata* graceful tarplant	--/--	4.2	–	Chaparral, cismontane woodland, coastal scrub, valley and foothill grassland. Elevation range 60–1,100 m.
Hordeum intercedens vernal barley	--/--	3.2	–	Coastal dunes, coastal scrub, valley and foothill grassland (saline flats and depressions), vernal pools. Elevation range 5–1,000 m.
Horkelia cuneata ssp. *puberula* mesa horkelia	--/--	1B.1	–	Chaparral, cismontane woodland, coastal scrub, sandy or gravelly sites. Elevation range 70–810 m.
Horkelia truncata Ramona horkelia	--/--	1B.3	–	Mixed chaparral, vernal streams, and disturbed areas near roads. Clay soil. Elevation range 400–1,300 m.
Horsfordia newberryi Newberry's velvet-mallow	--/--	4.3	–	Sonoran desert scrub (rocky). Elevation range 3–800 m.
Hosackia crassifolia var. *otayensis* Otay Mountain lotus	--/--	1B.1	–	Chaparral, metavolcanic, often in disturbed areas. Elevation range 910–1,005 m.
Hulsea californica San Diego sunflower	--/--	1B.3	–	Lower montane coniferous forest, upper montane coniferous forest, and chaparral. Coarse to fine sandy loam in disturbed chaparral openings at high elevations. Elevation range 1,000–2,915 m.
Hulsea mexicana Mexican hulsea	--/--	2B.3	–	Chaparral. Volcanic soils or burns and disturbed sites. Elevation range 665–1,200 m.
Hulsea vestita ssp. *Callicarpha* beautiful hulsea	--/--	4.2	–	Chaparral, lower montane coniferous forest/rocky or gravelly, granitic. Elevation range 915–3,050 m.
Hymenothrix wrightii Wright's hymenothrix	--/--	4.3	–	Cismontane woodland, lower montane coniferous forest, valley and foothill grassland. Elevation range 1,400– 1,550 m.
Ipomopsis tenuifolia slender-leaved ipomopsis	--/--	2B.3	–	Chaparral, pinyon–juniper woodland, Sonoran desert scrub. Dry rocky or gravelly slopes. Elevation range 100– 1,200 m.

Species[1]	State/Federal Status[2]	CRPR List/Code[2]	Regional HCP/NCCP Coverage[3]	Habitat
Isocoma menziesii var. *decumbens* decumbent goldenbush	--/--	1B.2	–	Coastal sage scrub intermixed with grasslands. Sandy soils; often in disturbed sites. Elevation range 10–910 m.
Iva hayesiana San Diego marsh-elder	--/--	2B.2	–	Marshes and swamps, playas, and river washes. Elevation range 10–500 m.
Juglans californica Southern California black walnut	--/--	4.2	–	Chaparral, cismontane woodland, coastal scrub/alluvial. Elevation range 50–900 m.
Juncus acutus ssp. *leopoldii* southwestern spiny rush	--/--	4.2	–	Coastal dunes (mesic), meadows and seeps (alkaline seeps), marshes and swamps (coastal salt). Elevation range 3–900 m.
Juncus cooperi Cooper's rush	--/--	4.3	–	Meadows and seeps (mesic, alkaline or saline). Elevation range 0–1,770 m.
Juncus luciensis Santa Lucia dwarf rush	--/--	1B.2	–	Chaparral, great basin scrub, lower montane coniferous forest, meadows and seeps, vernal pools. Elevation range 300–2,040 m.
Lasthenia glabrata ssp. *coulteri* Coulter's goldfields	--/--	1B.1	–	Tidal marsh, vernal pools, alkaline marsh. Usually found on alkaline soils in playas, sinks, and grasslands. Elevation range 1–1,400 m.
Lathyrus splendens pride-of-California		4.3	–	Chaparral. Elevation range 200–1,525 m.
Lepechinia cardiophylla heart-leaved pitcher sage	--/--	1B.2	NE, MSCP (covered in all approved MSCP Subarea Plans)	Closed-cone coniferous forest, chaparral, cismontane woodland. Elevation range 550–1,370 m.
Lepechinia ganderi Gander's pitcher sage	--/--	1B.3	NE, MSCP (covered in all approved MSCP Subarea Plans except Poway)	Closed-cone coniferous forest, chaparral, coastal sage scrub, valley and foothill grassland. Usually found in chaparral or coastal scrub; sometimes in Tecate cypress woodland. Gabbro or metavolcanic substrate. Elevation range 300–1,000 m.
Lepidium flavum var. *felipense* Borrego Valley pepper-grass (= Blair Valley pepper-grass)	--/--	1B.2	–	Sonoran desert scrub, pinyon–juniper woodland. Sandy, clay, or silty soils. Elevation range 450–840 m.
Lepidium virginicum var. *robinsonii* Robinson's pepper-grass	--/--	4.3	–	Chaparral, coastal scrub. Dry soils, shrubland. Elevation range 1–945 m.
Leptosiphon floribundus ssp. *hallii* Santa Rosa Mountains leptosiphon	--/--	1B.3	–	Sonoran desert scrub. Desert canyons. Elevation range 900–1,275 m.
Leptosyne maritima sea dahlia	--/--	2B.2	–	Coastal scrub, coastal bluff scrub. Occurs on a variety of soil types, including sandstone. Elevation range 5–150 m.

Species[1]	State/Federal Status[2]	CRPR List/Code[2]	Regional HCP/NCCP Coverage[3]	Habitat
Lessingia glandulifera var. *tomentosa* Warner Springs lessingia	--/--	1B.3	–	Chaparral. Sandy soils; Warner Ranch; San Diego County along roadsides in high desert chaparral. Elevation range 860–1,220 m.
Lewisia brachycalyx short-sepaled lewisia	--/--	2B.2	–	Lower montane coniferous forest, meadows. Dry to moist meadows in rich loam. Elevation range 1,400–2,300 m.
Lilium humboldtii ssp. *ocellatum* ocellated Humboldt lilly		4.2	–	Chaparral cismontane woodland, coastal scrub, lower montane coniferous forest, riparian woodland/openings. Elevation range 30–1,800 m.
Lilium parryi lemon lily	--/--	1B.2	–	Lower montane coniferous forest, meadows and seeps, riparian forest, upper montane coniferous forest. Wet, mountainous terrain; generally found in forested areas; on shady edges of streams, in open boggy meadows and seeps. Elevation range 1,300–2,790 m.
Limnanthes alba ssp. *parishii* Parish's meadowfoam	SE	1B.2	–	Meadows and seeps, vernal pools. Vernally moist areas and temporary seeps of highland meadows and plateaus; often bordering lakes and streams. Elevation range 600– 1,760 m.
Linanthus bellus desert beauty	--/--	2B.1	–	Chaparral. Dry slopes and flats; open sandy spots in chaparral, mostly in loamy coarse sandy DG soil types. Elevation range 920–1,400 m.
Linanthus maculatus Little San Bernardino Mtns. linanthus	--/--	1B.2	–	Sandy washes in desert mountains, flat areas. Elevation range 900–1,100 m.
Linanthus orcuttii Orcutt's linanthus	--/--	1B.3	–	Chaparral, lower montane coniferous forest. Sometimes in disturbed areas; often in gravelly clearings. Elevation range 1,060–2,000 m.
Lupinus excubitus var. *medius* Mountain Springs bush lupine	--/--	1B.3	–	Pinyon–juniper woodland, Sonoran desert scrub. Dry, sandy, gently sloping canyon washes, sandy soil pockets, and flats in steeper slopes and drainages. Elevation range 425–1,370 m.
Lyciumcalifornicum California box-thorn	--/--	4.2	–	Coastal bluff scrub, coastal scrub. Elevation range 5– 150 m.
Lycium parishii Parish's desert-thorn	--/--	2B.3	–	Coastal scrub, Sonoran desert scrub. Elevation range 300–1,000 m.
Lyrocarpa coulteri Palmer's lyrepod	--/--	4.3	–	Sonoran desert scrub (gravelly or rocky). Elevation range 120–795 m.
Malacothamnus aboriginum Indian Valley bush-mallow	--/--	1B.2	–	Chaparral, cismontane woodland. Rocky, granitic soils, often in burned areas. Elevation range 150–1,700 m.

Species[1]	State/Federal Status[2]	CRPR List/Code[2]	Regional HCP/NCCP Coverage[3]	Habitat
Malperia tenuis brown turbans	--/--	2B.3	–	Sonoran desert scrub. Sandy places and rocky slopes. Elevation range 15–335 m.
Matelea parvifolia Spearleaf = spear-leaf matalea	--/--	2B.3	–	Mojavean desert scrub, Sonoran desert scrub. Dry rocky ledges and slopes. Elevation range 440–1,095 m.
Mentzelia hirsutissima hairy stickleaf	--/--	2B.3	–	Sonoran desert scrub. Washes, fans, slopes; coarse rubble and talus slopes; rocky sites. Elevation range -5–800 m.
Mentzelia tricuspis spiny-hair blazing star	--/--	2B.1	–	Sandy or gravelly slopes or washes in creosote-bush scrub. Elevation range 150–1,280 m.
Mentzelia tridentata creamy blazing star	--/--	1B.3	–	Mojavean desert scrub. Elevation range 700–1,160 m.
Microseris douglasii ssp. *platycarpha* small-flowered microseris		4.2	–	Cismontane woodland, coastal scrub, valley and foothill grassland, vernal pools/clay. Elevation range 15–1,070 m.
Mimulus aurantiacus var. *aridus [Diplacus aridus]* Jacumba monkey flower (= low bush monkeyflower)	--/--	4.3	–	Rocky chaparral, Sonoran desert scrub. Elevation range 750–1,200 m.
Mimulus clevelandii [Diplacus clevelandii] Cleveland's bush monkey flower	--/--	4.2	–	Chaparral, cismontane woodland, lower montane coniferous forest/gabbroic, often in disturbed areas, openings, rocky. Elevation range 815–2,000 m.
Mimulus diffuses [Erythranthe diffusa] Palomar monkeyflower	--/--	4.3	–	Chaparral, yellow pine forest. Elevation range 0–2,100 m.
Mirabilis tenuiloba slender-lobed four o'clock	--/--	4.3	–	Sonoran desert scrub. Elevation range 300–1,095 m.
Mobergia calculiformis light gray lichen	--/--	3	–	Coastal scrub. Abundant on cobbles in right habitat; only known from one site in Baja California and one in the San Diego area.
Monardella hypoleuca ssp. *intermedia* intermediate monardella	--/--	1B.3	–	Chaparral, oak woodland, occasionally conifer forest, dry slopes. Elevation range 200–1,250 m.
Monardella hypoleuca ssp. *lanata* felt-leaved monardella	--/--	1B.2	NE, MSCP (covered in all approved MSCP Subarea Plans except Poway)	Chaparral, cismontane woodland. Occurs in understory in mixed chaparral, chamise chaparral, and southern oak woodland; sandy soil. Elevation range 300–1,575 m.

Species[1]	State/Federal Status[2]	CRPR List/Code[2]	Regional HCP/NCCP Coverage[3]	Habitat
Monardella macrantha ssp. *Hallii* Hall's monardella	--/--	1B.3	–	Broadleaved upland forest, chaparral, lower montane coniferous forest, cismontane woodland, valley and foothill grassland. Dry slopes and ridges in openings within the above communities. Elevation range 695– 2,195 m.
Monardella nana ssp. *leptosiphon* San Felipe monardella	--/--	1B.2	–	Chaparral, lower montane coniferous forest. Sometimes in openings and fuel breaks or in the understory of forest or chaparral. Elevation range 1,200–1,855 m.
Monardella stoneana Jennifer's monardella	--/--	1B.2	–	Coastal scrub, chaparral, closed cone coniferous forest, riparian scrub. Usually found In rocky, intermittent streambeds. Elevation range 10–660 m.
Monardella viminea willowy monardella	FE/SE	1B.1	MSCP (covered in all approved MSCP Subarea Plans)	Coastal scrub/alluvial ephemeral washes with adjacent coastal scrub, chaparral, or sycamore woodland. In canyons, in rocky and sandy places, sometimes in washes or floodplains. Elevation range 50–225 m.
Mucronea californica California spineflower	--/--	4.2	–	Chaparral, cismontane woodland, coastal dunes, coastal scrub, valley and foothill grassland/sandy. Elevation range 0–1,400 m.
Muhlenbergia appressa appressed muhly	--/--	2B.2	–	Coastal scrub, Mojavean desert scrub, valley and foothill grassland/rocky. Elevation range 20–1,600 m.
Myosurus minimus ssp. *apus* little mousetail	--/--	3.1	NE, Carlsbad HMP	Vernal pools. Alkaline soils. Elevation range 20–640 m.
Nama stenocarpum mud nama	--/--	2B.2	–	Marshes and swamps. Lake shores, riverbanks, intermittently wet areas. Elevation range 5–500 m.
Nasturtium gambelii Gambel's water cress	FE/ST	1B.1	–	Marshes and swamps. Freshwater and brackish marshes at the margins of lakes and along streams, in or just above the water level. Elevation range 5–1,305 m.
Navarretia fossalis spreading navarretia	FT	1B.1	NE, MSCP (covered in Chula Vista and City of San Diego Subarea Plans (CDFW only), and in VPHCP), Carlsbad HMP	Vernal pools, chenopod scrub, marshes and swamps, playas. San Diego hardpan and San Diego claypan vernal pools; in swales and vernal pools, often surrounded by other habitat types. Elevation range 30–1,300 m.
Navarretia peninsularis Baja navarretia	--/--	1B.2	–	Lower montane coniferous forest, chaparral. Wet areas in open forest. Elevation range 1,500–2,425 m.
Navarretia prostrata prostrate navarretia (= prostrate vernal pool navarretia)	--/--	1B.2	MSCP (covered in La Mesa and South County approved MSCP Subarea Plans)	Coastal scrub, valley and foothill grassland, vernal pools. Alkaline soils in grassland, or in vernal pools. Elevation range 15–700 m.
Nemacaulis denudata var. *denudata* coast woolly-heads	--/--	1B.2	–	Mildly protected coastal sand dunes. Elevation range 0– 100 m.

Species[1]	State/Federal Status[2]	CRPR List/Code[2]	Regional HCP/NCCP Coverage[3]	Habitat
Nemacaulis denudata var. *gracilis* slender woolly-heads (= slender cottonheads)	--/--	2B.2	–	Coastal dunes, desert dunes, Sonoran desert scrub. In dunes or sand. Elevation range 0–560 m.
Nemacladus twisselmannii Twisselmann's nemacladus	--/--	1B.2	–	Granitic sands, rocks, yellow pine forest and near pinyon pine woodland. Elevation of the known occurrence is 1,213 m.
Nolina cismontana chaparral nolina	--/--	1B.2	–	Chaparral, coastal scrub. Primarily on sandstone and shale substrates; also known from gabbro. Elevation range 140–1,275 m.
Nolina interrata Dehesa nolina	SE/PT	1B.1	NE, MSCP (covered in all approved MSCP Subarea Plans except Poway)	Chaparral. Typically on rocky hillsides or ravines on ultramafic soils (gabbro or metavolcanic). Elevation range 180–855 m
Ophioglossum californicum California adder's-tongue	--/--	4.2	–	Chaparral, valley and foothill grassland, vernal pools (margins)/mesic. Elevation range 60–525m.
Orcuttia californica California Orcutt grass	FE/SE	1B.1	NE, MSCP (covered in all approved MSCP Subarea Plans except Poway), VPHCP, and Carlsbad HMP	Vernal pools. Elevation range 15–660 m.
Ornithostaphylos oppositifolia Baja California birdbush	SE	2B.1	–	Chaparral. Associated with *Ceanothus verrucosus* and *Salvia mellifera* in California. Elevation range 55–800 m.
Orobanche parishii ssp. *Brachyloba [Aphyllon parishii ssp. brachylobum]* short-lobed broomrape	--/--	4.2	–	Coastal bluff scrub, coastal dunes, coastal scrub/sandy. Elevation range 60–525 m.
Packera ganderi Gander's ragwort	SR	1B.2	MSCP (covered in all approved MSCP Subarea Plans except Poway	Recently burned sites and gabbro outcrops. Elevation range 400–1,200 m.
Penstemon clevelandii var. *connatus* San Jacinto beardtongue	--/--	4.3	–	Chaparral, pinyon–juniper woodland, Sonoran desert scrub/rocky. Elevation range 400–1,500 m.
Penstemon thurberi Thurber's beardtongue	--/--	4.2	–	Chaparral, Joshua tree woodland, pinyon–juniper woodland, Sonoran desert scrub. Elevation range 500– 1,200 m.
Pentachaeta aurea ssp. *aurea* golden-rayed pentachaeta	--/--	4.2	–	Chaparral, cismontane woodland, coastal scrub, lower montane coniferous forest, riparian woodland, valley and foothill grassland. Elevation range 80–1,850 m.

Species[1]	State/Federal Status[2]	CRPR List/Code[2]	Regional HCP/NCCP Coverage[3]	Habitat
Perideridia gairdneri ssp. *gairdneri* Gairdner's yampah (= California Gairdner's yampah)	--/--	4.2	–	Broadleaved upland forest, chaparral, coastal prairie, valley and foothill grassland, vernal pools/vernally mesic. Elevation range 6–300 m.
Phacelia ramosissima var. *austrolitoralis* south coast branching phacelia	--/--	3.2	–	Chaparral, coastal dunes, coastal scrub, marshes and swamps (coastal salt)/sandy, sometimes rocky. Elevation range 0–365 m.
Phacelia stellaris Brand's phacelia (= Brand's star phacelia)		1B.1	–	Coastal scrub, coastal dunes. Open areas. Elevation range 5–1,515 m.
Pholistoma auritum var. *arizonicum* Arizona pholistoma	--/--	2B.3	–	Mojavean desert scrub. Elevation range 275–835 m.
Pickeringia montana var. *tomentosa* Montane chaparral pea (= woolly chaparral-pea)	--/--	4.3	–	Chaparral/gabbroic, granitic, clay. Elevation range 0– 1,700 m.
Pilostyles thurberi Thurber's pilostyles	--/--	4.3	–	Sonoran desert scrub. Elevation range 0–365 m.
Pinus torreyana ssp. *torreyana* Torrey pine	--/--	1B.2	MSCP (covered in all approved MSCP Subarea Plans except Poway), Carlsbad HMP	Closed-cone coniferous forest, southern maritime chaparral. On dry, sandstone slopes. Elevation range 70– 160 m.
Piperia cooperi chaparral rein orchid	--/--	4.2	–	Chaparral, cismontane woodland, valley and foothill grassland. Elevation range 15–585 m.
Piperia leptopetala narrow-petaled rein orchid	--/--	4.3	–	Cismontane woodland, lower montane coniferous forest, upper montane coniferous forest. Elevation range 380– 2,225 m.
Poa atropurpurea San Bernardino blue grass	FE	1B.2	–	Meadows and seeps. Mesic meadows of open pine forests and grassy slopes, loamy alluvial to sandy loam soil. Elevation range 1,350–2,455 m.
Pogogyne abramsii San Diego mesa mint	FE/SE	1B.1	MSCP (covered in all approved MSCP Subarea Plans except Poway) and VPHCP	Vernal pools. Vernal pools within grasslands, chamise chaparral or coastal sage scrub communities. Elevation range 90–200 m.

Species[1]	State/Federal Status[2]	CRPR List/Code[2]	Regional HCP/NCCP Coverage[3]	Habitat
Pogogyne nudiuscula Otay Mesa mint	FE/SE	1B.1	MSCP (covered in all approved MSCP Subarea Plans except Poway) and VPHCP	Vernal pools. Dry beds of vernal pools and moist swales with *Eryngium aristulatum* var. *parishii* and *Orcuttia californica*. Elevation range 85–250 m.
Polygala acanthoclada thorny milkwort	--/--	2B.3	–	Desert scrub, Joshua-tree or pinyon–juniper woodland, generally in loose, sandy or gravelly soil. Elevation range 945–1,830 m.
Polygala cornuta var. *fishiae* Fish's milkwort	--/--	4.3	–	Chaparral, cismontane woodland, riparian woodland. Elevation range 100–1,000 m.
Proboscidea althaeifolia desert unicorn-plant	--/--	4.3	–	Sandy areas in Sonoran desert scrub. Elevation range 150–1,000 m.
Pseudognaphalium leucocephalum white rabbit-tobacco	--/--	2B.2	–	Chaparral, cismontane woodland, coastal scrub, riparian woodland/sandy, gravelly. Elevation range 0–2,100 m.
Pseudorontium cyathiferum Deep Canyon snapdragon	--/--	2B.3	–	Desert washes or rocky slopes. Elevation range 0–800 m.
Psilocarphus brevissimus var. *multiflorus* Delta woolly-marbles	--/--	4.2	–	Vernal pools and flats, Elevation range 10–500 m.
Quercus cedrosensis Cedros Island oak	--/--	2B.2	–	Closed-cone coniferous forest, chaparral, coastal scrub. Elevation range 225–488 m.
Quercus dumosa Nuttall's scrub oak	—/FSC	1B.1	MHCP	Closed-cone coniferous forest, chaparral, coastal scrub. More common scrub oak now is *Q. berberidifolia*. Generally on sandy soils near the coast; sometimes on clay loam. Elevation range 15–400 m.
Quercus engelmannii Engelmann oak	--/--	4.2	–	Occurs in canyons and on open slopes in foothill and coastal regions, where it is associated with Engelmann oak woodland, chaparral, and grassland. Elevation ranges up to 1,300 m.
Rhus aromatica var. *simplicifolia* single-leaved skunkbrush	--/--	2B.3	–	Pinyon–juniper woodland. Elevation range 1,220– 1,370 m.
Ribes amarum var.*hoffmannii* Hoffmann's bitter gooseberry	--/--	3	–	Chaparral, riparian woodland. Elevation range 150– 1,190 m.
Ribes canthariforme Moreno currant	--/--	1B.3	–	Chaparral. Among boulders in oak–manzanita thickets; shaded or partially shaded sites. Elevation range 340– 1,200 m.
Ribes viburnifolium Santa Catalina Island currant	--/--	1B.2	–	Chaparral. Among shrubs in canyons. Elevation range 30– 300 m.

Species[1]	State/Federal Status[2]	CRPR List/Code[2]	Regional HCP/NCCP Coverage[3]	Habitat
Romneya coulteri Coulter's matilija poppy	--/--	4.2	–	Chaparral, coastal scrub; often in burns. Elevation range 20–1,200 m.
Rosa minutifolia small-leaved rose	SE	2B.1	MSCP (covered in all approved MSCP Subarea Plans except Poway)	Coastal scrub, chaparral. In California, on cobbly soil at the head of a small, dry canyon on Otay Mesa. Elevation range 150–160 m.
Rubus glaucifolius [Rubus glaucifolius var. ganderi] Cuyamaca raspberry	--/--	3.1	–	The variety *R. c.* var. *ganderi* is no longer recognized as a separate taxa (Baldwin 2012). Lower montane coniferous forest. Open, moist forest; gabbro soils. Elevation range 1,200–1,730 m.
Rupertia rigida Parish's rupertia	--/--	4.3	–	Chaparral, cismontane woodland, lower montane coniferous forest, meadows and seeps, pebble plain, valley and foothill grassland. Elevation range 700– 25,00 m.
Saltugilia caruifolia caraway-leaved woodland-gilia	--/--	4.3	–	Chaparral, lower montane coniferous forest/sandy, openings. Elevation range 1,400–2,300 m.
Salvia eremostachya desert sage	--/--	4.3	–	Sonoran desert scrub (rocky or gravelly). Elevation range 700–1,400 m.
Salvia munzii Munz' sage	--/--	2B.2	–	Coastal scrub, chaparral. Rolling hills and slopes, in rocky soil. Elevation range 120–1,090 m.
Schizymenium shevockii [Mielichhoferia shevockii] Shevock's copper-moss	--/--	1B.2	–	Cismontane woodland. On metamorphic rocks, mesic sites. On rocks along roads. Elevation range 750–1,400 m.
Scutellaria bolanderi ssp. *austromontana* southern skullcap (= southern mountains skullcap)	--/--	1B.2	–	Chaparral, cismontane woodland, lower montane coniferous forest. In gravelly soils on stream banks or in mesic sites in oak or pine woodland. Elevation range 425–2,000 m.
Selaginella asprella bluish spike-moss	--/--	4.3	–	Cismontane woodland, lower montane coniferous forest, pinyon–juniper woodland, subalpine coniferous forest, upper montane coniferous forest/granitic, rocky. Elevation range 1,600–2,700 m.
Selaginella cinerascens ashy spike-moss	--/--	4.1	–	Chaparral, coastal scrub. Elevation range 20–640 m.
Selaginella eremophila desert spike-moss	--/--	2B.2	–	Sonoran desert scrub. Shaded sites, gravelly soils; crevices or among rocks. Elevation range 300–2,425 m.
Senecio aphanactis rayless ragwort (= chaparral ragwort)	--/--	2B.2	–	Cismontane woodland, coastal scrub. Drying alkaline flats. Elevation range 20–575 m.

Species[1]	State/Federal Status[2]	CRPR List/Code[2]	Regional HCP/NCCP Coverage[3]	Habitat
Senecio astephanus San Gabriel ragwort	--/--	4.3	–	Coastal bluff scrub, chaparral/rocky slopes. Elevation range 400–1,500 m.
Senna covesii Coves' cassia	--/--	2B.2	–	Sonoran desert scrub. Dry, sandy desert washes, slopes. Elevation range 200–1,070 m.
Sibaropsishammittii Hammitt's clay-cress	--/--	1B.2	–	Valley and foothill grassland, chaparral. Mesic microsites in open areas on clay soils in grassland. Elevation range 730–1,065 m.
Sidalcea neomexicana Salt Spring checkerbloom	--/--	2B.2	–	Alkali playas, brackish marshes, chaparral, coastal scrub, lower montane coniferous forest, Mojavean desert scrub. Elevation range 0–1,500 m.
Solanum xanti [S.tenuilobatum] narrow-leaved nightshade	--/--		MSCP (covered in all approved MSCP Subarea Plans)	*S. tenuilobatum* is considered a synonym of *S. xanti*, (Baldwin 2012), a common species, and is therefore no longer considered sensitive.
Spermolepis echinata bristly scaleseed	--/--	2B.3	–	Sonoran desert scrub. Sandy or rocky sites. Elevation range 60–1,500 m.
Spermolepis lateriflora western bristly scaleseed	--/--	2A		Sonoran desert scrub. Rocky or sandy. 360–670 m in elevation. Blooms March–April. Annual.
Spermolepis infernensis Hellhole scaleseed	--/--	1B.2		Sonoran desert scrub. Rocky or sandy. 230–670 m in elevation. Blooms March–April. Annual.
Sphaerocarpos drewei bottle liverwort	--/--	1B.1	–	Chaparral, coastal scrub. In openings; on soil. Elevation range 90–600 m.
Sphenopholis obtusata prairie wedge grass	--/--	2B.2	–	Wet meadows, stream banks, and ponds. Elevation range 240–2,870 m.
Stemodia durantifolia purple stemodia	--/--	2B.1	–	Sonoran desert scrub, sandy soils; mesic sites. Elevation range 180–300 m.
Stipa diegoensis San Diego County needle grass	--/--	4.2	–	Chaparral, coastal scrub. Found in rocky, often mesic substrates. Elevation ranges up to 2,280 m.
Streptanthus bernardinus Laguna Mountains jewel-flower	--/--	4.3	–	Chaparral, lower montane coniferous forest. Elevation range 670–2,500 m.
Streptanthus campestris southern jewel-flower	--/--	1B.3	–	Chaparral, lower montane coniferous forest, pinyon– juniper woodland, open, rocky areas. Elevation range 600–2,790 m.
Stylocline citroleum oil neststraw	--/--	1B.1	–	Open, stable, often crusted sand, clay, dry drainage edges, between *Atriplex* shrubs. Elevation range 60–300 m.
Suaeda esteroa estuary seablite	--/--	1B.2	–	Coastal salt marshes and swamps, in clay, silt, and sand substrates. Elevation range 0–5 m.

Species[1]	State/Federal Status[2]	CRPR List/Code[2]	Regional HCP/NCCP Coverage[3]	Habitat
Suaeda taxifolia woolly seablite	--/--	4.2	–	Coastal bluff scrub, coastal dunes, marshes and swamps (margins of coastal salt). Elevation range 0–50 m.
Symphyotrichum defoliatum San Bernardino aster	--/--	1B.2	–	Meadows and seeps, marshes and swamps, coastal scrub, cismontane woodland, lower montane coniferous forest, grassland. Vernallymesic grassland or near ditches, streams and springs; disturbed areas. Elevation range 2– 2,040 m.
Tetracoccus dioicus Parry's tetracoccus	--/--	1B.2	MSCP (covered in all approved MSCP Subarea Plans except Poway)	Chaparral, coastal scrub, stony, decomposed gabbro soil. Elevation range 150–1,000 m.
Texosporium sancti-jacobi woven-spored lichen	--/--	3	–	Chaparral, open sites. Elevation range 290–660 m.
Thermopsis californica var. *semota* velvety false lupine	--/--	1B.2	–	Lower montane coniferous forest. Elevation range 1,000– 1,870 m.
Triquetrella californica coastal triquetrella	--/--	1B.2	–	Coastal bluff scrub, coastal scrub. Moss growing on soil. Elevation range 10–100 m.
Viguiera laciniata [Bahiopsis laciniata] San Diego County viguiera	--/--	4.3	–	Chaparral, coastal scrub. Elevation range 60–750 m.
Viguiera purisimae La Purisima viguiera	--/--	2B.3	–	Coastal bluff scrub, chaparral. Elevation range 365– 425 m.
Wislizenia refracta ssp. *palmeri* Palmer's jackass clover	--/--	2B.2	–	Chenopod scrub, desert dunes, Sonoran desert scrub, Sonoran thorn woodland. Elevation range 0–300 m.

1 Botanical species nomenclature follows Rebman and Simpson (2014) *Checklist of the Vascular Plants of San Diego County*. Elevation follows Baldwin et al. 2012 and Jepson Flora Project. Occurrences cross-checked with CalFlora 2021 and CNDDB 2021.

2 Sensitivity Codes:

State Listed Plants: SE = State-listed, endangered; SR = State-listed, rare; ST = State-listed, threatened

Federal Candidates and Listed Plants: FE = Federally listed, endangered; FT = Federally listed, threatened; FC = Candidate for federal listing CRPR Threat Code Extensions: .1 = Seriously endangered in California; .2 = Fairly endangered in California; .3 = Not very threatened in California

California Rare Plant Rank (CaRPR): 1A = Species presumed extinct; 1B = Species rare, threatened, or endangered in California and elsewhere; 2A = Plants Presumed Extirpated in California, but more common elsewhere. These species are eligible for state listing; 2B = Species rare, threatened, or endangered in California but which are more common elsewhere. These species are eligible for state listing; 3 = Species for which more information is needed. Distribution, endangerment, and/or taxonomic information is needed. 4 = A watch list of species of limited distribution. These species need to be monitored for changes in the status of their populations.

3 HC/NCCP coverage is based on the cities of Chula Vista, La Mesa, Poway, and San Diego and the County of San Diego (South County), which have adopted Subarea Plans (i.e., NCCP/HCP) under the San Diego County MSCP, and the City of Carlsbad, which has an adopted Subarea Plan (i.e., NCCP/HCP) under the MHCP. Codes are as follows: MSCP = Multiple Species Conservation Program covered species; MHCP = Multiple Habitat Conservation Program covered species; NE = MSCP or MHCP narrow endemic species; OW = Obligate Wetland Species.

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4.3 APPENDIX D-3 SENSITIVE WILDLIFE SPECIES

Species[1]	Sensitivity Status[2]	Regional HCP/NCC Coverage[3]	Habitat
Crustaceans			
Branchinecta sandiegonensis San Diego fairy shrimp	FE, IUCN:EN	MSCP: (covered in all approved MSCP Subarea Plans and the VPHCP)	Vernal pools. Endemic to mesas in San Diego and Orange counties.
Streptocephalus woottoni Riverside fairy shrimp	FE, IUCN:EN	MSCP: (covered in all approved MSCP Subarea Plans and the VPHCP)	Endemic to western Riverside, Orange, and San Diego counties in areas of tectonic swales/earth slump basins in grassland and coastal sage scrub.
Insects			
Euphyes vestris harbisoni dun skipper	FSC	MHCP	This species is restricted to riparian areas, intermittent streams, and oak woodlands where its larval host plant, San Diego sedge (*Carex spissa*), is present.
Cicindela hirticollis gravida sandy beach tiger beetle	–	–	Inhabits areas adjacent to non-brackish water along the coast of California from San Francisco Bay to northern Mexico. Prefers clean, dry, light-colored sand in the upper zone. Subterranean larvae prefer moist sand not affected by wave action.
Anomala carlsoni Carlson's dune beetle	–	–	Host preferences unknown. Known primarily from creosote bush scrub. Once found in Borrego Springs, San Diego County.
Bombus crotchii Crotch's bumblebee	CC, IUCN:EN	–	Found primarily in California: mediterranean, Pacific coast, western desert, Great Valley, and adjacent foothills through most of southwestern California. Habitat includes open grassland and scrub. Nests underground.
Callophrys thornei Thorne's hairstreak	BLM:S2	MSCP: (covered in all approved MSCP Subarea Plans)	Occurs exclusively in cypress woodland.
Cicindela gabbii western tidal-flat tiger beetle	–	–	Inhabits estuaries and mudflats along the coast of southern California. Generally found on dark-colored mud in the lower zone; occasionally found on dry saline flats of estuaries.
Cicindela latesignata latesignata western beach tiger beetle	–	–	Mudflats and beaches in coastal southern California.
Cicindela senilis frosti senile tiger beetle	–	–	Inhabits marine shoreline, from central California coast south to salt marshes of San Diego. Also found at Lake Elsinore. Inhabits dark- colored mud in the lower zone and dried salt pans in the upper zone.
Coelus globosus globose dune beetle	IUCN:VU	–	Inhabits coastal sand dune habitat, from Bodega Head in Sonoma County south to Ensenada, Mexico. Inhabits foredunes and sand hummocks; it burrows beneath the sand surface, and is most common beneath dune vegetation.

Species[1]	Sensitivity Status[2]	Regional HCP/NCC Coverage[3]	Habitat
Danaus plexippus monarch butterfly	FPT, IUCN:EN, USFS:S	–	Roosts located in wind-protected tree groves (eucalyptus, Monterey pine, cypress), with nectar and water sources nearby. Winter roost sites extend along the coast from northern Mendocino to Baja California, Mexico.
Euphydryas editha quino quino checkerspot butterfly	FE, Xerces:CI	–	Sunny openings within chaparral and coastal sage shrublands in parts of Riverside and San Diego counties. Host plants include *Plantago erecta, p. patagonica, Castilleja exserta, Anterrhinum coulterianum, Cordylanthus rigidus, and Collinsia concolor.*
Halictus harmonius haromonius halictid bee	Xerces:CI	–	Known only from the foothills of the San Bernardino Mountains and possibly found in San Jacinto Mountains. Habitat preferences not well studied to date.
Lycaena hermes Hermes copper butterfly	FT, IUCN:VU, USFS:S	MHCP	Found in southern mixed chaparral and coastal sage scrub at western edge of Laguna mountains. Host plant is *Rhamnus crocea*.
Melitta californica California mellitid bee	–	–	Found in desert regions. Habitat preferences not well studied to date.
Oliarces clara Cheeseweed owlfly (cheeseweed moth lacewing)	–	–	Occurs in bajadas in association with creosote bush scrub.
Panoquina errans wandering (saltmarsh) skipper	IUCN:NT	MSCP (covered in all approved MSCP Subarea Plans) MHCP: OW	Southern California coastal salt marshes. Requires moist saltgrass for larval development.
Parnopes borregoensis Borrego parnopes cuckoo wasp	–	–	Found in Anza-Borrego Desert State Park. Habitat preferences not well studied to date.
Pyrgus ruralis lagunae Laguna Mountains skipper	FE, Xerces:CI	–	Only in a few open meadows in yellow pine forest between 5,000 and 6,000 feet above sea level in the vicinity of Mount Laguna and Palomar mountains. Host plant is *Horkelia bolanderi clevelandi.*
Mollusks			
Helminthoglypta coelata mesa shoulderband	IUCN:VU	–	Found in rock slides, beneath bark and rotten logs, and among coastal vegetation. Known only from a few locations in coastal San Diego County.
Helminthoglypta milleri peak shoulderband	–	–	Found in rock piles. Known only from the type locality at Cuyamaca peak in San Diego County.
Rothelix warnerfontis Warner Springs shoulderband	USFS:S	–	Abandoned wood rat nests and fallen logs and leaf mold of *Quercus agrifolia*.
Tryonia imitator mimic tryonia California brackishwater snail	IUCN:DD	–	Found only in permanently submerged areas in a variety of sediment types; able to withstand a wide range of salinities. Inhabits coastal lagoons, estuaries, and salt marshes, from Sonoma County south to San Diego County.
Fish			
Cyprinodon macularius desert pupfish	FE, CE, AFS:EN, IUCN:VU	–	Desert ponds, springs, marshes and streams in southern California.

Species[1]	Sensitivity Status[2]	Regional HCP/NCC Coverage[3]	Habitat
Gasterosteus aculeatus williamsoni unarmored threespine stickleback	FE, CE, CFP, AFS:EN	–	Found in weedy pools, backwaters, and among emergent vegetation at the stream edge in small streams.
Gila orcuttii arroyo chub	CSC, AFS:VU, USFS:S, IUCN :VU	–	Found in weedy pools, backwaters, and among emergent vegetation at the stream edge in small streams.
Oncorhynchus mykiss irideus southern steelhead – southern California DPS	FE, CCE, AFS:EN	–	Federal listing refers to populations from Santa Maria River south to southern extent of range (San Mateo Creek in San Diego County).
Eucyclogobius newberryi tidewater goby	FE, CSC, AFS:EN, IUCN:VU	–	Found in shallow lagoons and lower stream reaches with still but not stagnant water and high oxygen levels. Brackish water habitats are along the California coast from Agua Hedionda Llagoon, San Diego County to the mouth of the Smith River.
Amphibians			
Anaxyrus californicus Arroyo toad	FE, CSC, IUCN:EN	MSCP: (covered in all approved MSCP Subarea Plans)	Rivers with sandy banks, willows, cottonwoods, and sycamores; loose, gravelly areas of streams in drier parts of range.
Ensatina klauberi large-blotched salamander	CSC, CWL, USFS:S	–	Moist shaded evergreen and deciduous forests and oak woodlands and higher elevations. Found under rocks, logs, other debris, especially bark that has peeled off and fallen beside logs and trees. Most common where there is a lot of coarse woody debris on the forest floor.
Rana draytonii California red-legged frog	FT, CSC, IUCN:VU	MSCP: (covered in all approved MSCP Subarea Plans)	Slow parts of streams, lakes, reservoirs, ponds, and other usually permanent water sources; primarily in wooded areas in lowlands and foothills, but also can be found in grassland. Typical habitat consists of deep-water pools ringed by thick vegetation (especially arroyo willow or native cattails). Extirpated in San Diego County.
Rana muscosa Southern mountain yellow-legged frog	FE, CE, CWL, IUCN:EN, USFS:S	–	Always encountered within a few feet of water. Federal listing refers to populations in the San Gabriel, San Jacinto and San Bernardino mountains only.
Spea hammondii western spadefoot	FPT, CSC, BLM:S, IUCN:NT	–	Occurs primarily in grassland and coastal sage scrub habitats, but can be found in valley-foothill hardwood woodlands. Vernal pools are essential for breeding.
Taricha torosa Coast Range newt	CSC	–	Lives in terrestrial habitats oak forests and chaparral, grasslands and breeds in ponds, reservoirs, coastal drainages, or slow moving streams.
Reptiles			
Anniella pulchra pulchra silvery legless lizard	CSC, USFS:S	MSCP (Poway MSCP only)	Sandy or loose loamy soils under sparse vegetation. Prefers soils with high moisture content.
Aspidoscelis hyperythra orangethroat whiptail	CWL, IUCN:LC, USFS:S	MSCP (covered in all approved MSCP Subarea Plans) MHCP	Inhabits low-elevation coastal sage scrub, chaparral, riparian habitats, and valley-foothill hardwood habitats.

Species[1]	Sensitivity Status[2]	Regional HCP/NCC Coverage[3]	Habitat
Aspidoscelis tigris stejnegeri coastal whiptail Aspidoscelis tigris stejnegeri	CSC	MSCP (Poway MSCP only)	Found in areas with sparse vegetation, open areas, and in woodland and riparian areas.
Charina trivirgata rosy boa	IUCN:LC, USFS:S	MSCP (Poway MSCP only)	Desert, scrub chaparral from the coast to the Mojave and Colorado deserts. Prefers habitats with a mix of brushy cover and rocky soil such as coastal canyons and hillsides, desert canyons, washes, and mountains.
Chelonia mydas green turtle	FT, IUCN:EN	–	Warm waters of San Diego Bay and adjacent ocean areas.
Coleonyx switaki barefoot gecko (= barefoot banded gecko)	CT, IUCN:LC, BLM:S	–	Found in arid rocky areas on flatlands, canyons, and thornscrub, especially where there are large boulders and rock outcrops, and where vegetation is sparse.
Coleonyx variegatus abbotti San Diego banded gecko	CSC	–	Found in granite or rocky outcrops in coastal scrub and chaparral habitats in coastal and cismontane southern California.
Crotalus ruber red-diamond rattlesnake	CSC, USFS:S, IUCN:LC	MSCP (Poway MSCP only)	Occurs in rocky areas and dense vegetation in chaparral, woodland, grassland, and desert areas from coastal San Diego County to the eastern slopes of the mountains.
Diadophis punctatus similis San Diego ringneck snake	USFS:S	MSCP (Poway MSCP only)	Moist habitats, including wet meadows, rocky hillsides, gardens, farmland, grassland, chaparral, mixed coniferous forests, and woodlands.
Actinemys pallida southwestern pond turtle	FPT, CSC, BLM:S, IUCN:VU, USFS:S	MSCP: (covered in all approved MSCP Subarea Plans)	Slow-moving permanent or intermittent streams, small ponds, and small lakes.
Lampropeltis zonata (pulchra) California mountain kingsnake (San Diego population)	CSC, IUCN:LC, BLM:S, USFS:S	–	Inhabits a variety of habitats, including valley-foothill hardwood, coniferous, chaparral, riparian, and wet meadows.
Phrynosoma blainvillii Coast horned lizard	CSC, BLM:S, IUCN:LC	MSCP (covered in all approved MSCP Subarea Plans)	Prefers friable, rocky, or shallow sandy soils in coastal sage scrub and chaparral.
Phrynosoma mcallii flat-tailed horned lizard	,CSC, BLM:S, IUCN:NT	–	Restricted to fine wind-blown sand in desert washes, desert flats, and areas with creosote bush scrub in eastern San Diego county.
Plestiodon skiltonianus interparietalis Coronado island skink	CWL, BLM:S	MSCP (Poway MSCP only)	Prefers early successional stages or open areas. Found in rocky areas close to streams and on dry hillsides in grassland, scrub, chaparral, pinon- juniper and juniper sage woodland, pine-oak and pine forests in coast ranges of southern California.
Salvadora hexalepis virgultea coast patch-nosed snake	CSC	MSCP (Poway MSCP only)	Coastal sage scrub and chaparral in coastal southern California.
Sceloporus orcutti Granite Spiny Lizard	–	MSCP (Poway MSCP only)	Found on the desert slopes of the mountains and on the coastal side inland to near the coast and north to the Santa Ana River where there are large boulders and granite cliffs is with mixed vegetation, including chaparral, scrub, and forest/woodland areas.

Species[1]	Sensitivity Status[2]	Regional HCP/NCC Coverage[3]	Habitat
Thamnophis hammondii two-striped garter snake	CSC, BLM:S, IUCN:LC, USFS:S	MSCP (Poway MSCP only)	Highly aquatic, found in or near permanent fresh water. Often along streams with rocky beds and riparian from sea level to about 7,000 feet in elevation.
Thamnophis sirtalis ssp. south coast garter snake	CSC	–	Utilizes a wide variety of habitats including forests, mixed woodlands, grassland, chaparral, farmlands, ponds, marshes, and/or streams.
Uma notata Colorado Desert fringe-toed lizard	CSC, BLM:S, IUCN:NT	–	Colorado desert region; in sand dunes, dry lakebeds, sandy beaches or riverbanks, desert washes, or sparse desert scrub. Requires fine, loose, windblown sand (for burrowing).
Xantusia gracilis sandstone night lizard	CSC, IUCN:VU	–	Inhabits a very small area of sandstone and mudstone.
Birds			
Ardea alba great egret	CDF:S, IUCN:LC (nesting colony)	–	Nests in tall, large trees in proximity to ponds, lakes, streams, or other water sources.
Ardea herodias great blue heron	CDF:S, IUCN:LC (nesting colony)	–	Nests in dense reeds in proximity to ponds, lakes, or other permanent water sources.
Botaurus lentiginosus American bittern	IUCN:LC	–	Nests in tall, large trees in proximity to ponds, lakes, streams, or other water sources.
Egretta thula snowy egret	IUCN:LC (nesting colony)	–	Nests in tall, large trees in proximity to ponds, lakes, streams, or other water sources.
Egretta rufescens Reddish egret	IUCN:LC	MSCP (covered in all approved MSCP Subarea Plans except Poway)	Salt marsh and estuarine habitats.
Aquila chrysaetos golden eagle	BCC, SSC, BEPA, CFP, CWL, CDF:S, BLM:S, IUCN:LC (nesting and wintering)	MSCP: NENE, MSCP (covered in all approved MSCP Subarea Plans)	Rolling foothills, mountain areas, sage- juniper flats, and desert. Cliff- walled canyons provide nesting habitat in most parts of range; also large trees in open areas.
Icteria virens yellow-breasted chat	CSC, IUCN:LC (nesting)	MHCP: OW	Summer breeding resident; inhabits riparian thickets of willow and other brushy tangles near watercourses. Nests in low, dense riparian, consisting of willow, blackberry, wild grape; forages and nests within 10 feet of ground.
Accipiter cooperii Cooper's hawk	CWL, IUCN:LC (nesting)	MSCP (covered in all approved MSCP Subarea Plans) MHCP	Nests mainly in riparian growths of deciduous trees, as in canyon bottoms on river floodplains; also, live oaks.
Agelaius tricolor tricolored blackbird	BCC, CT, CSC, ABC:WL, BCC, BLM:S, IUCN:EN (nesting)	MSCP (covered in all approved MSCP Subarea Plans)	Freshwater marshes with cattails and other emergent vegetation.

Species[1]	Sensitivity Status[2]	Regional HCP/NCC Coverage[3]	Habitat
Aimophila ruficeps canescens southern California rufous-crowned sparrow	CWL	MSCP (covered in all approved MSCP Subarea Plans) MHCP	Grassy or rocky slopes with open scrub at elevations from sea level to 2,000 feet. Occurs mainly in coastal sage scrub.
Ammodramus savannarum grasshopper sparrow	CSC, IUCN:LC (nesting)	–	Favors native grasslands with a mix of grasses, forbs, and scattered shrubs.
Amphispiza belli Bell's sparrow	BCC, CWL, ABC:WLBCC	–	Occurs mainly in coastal sage scrub and chaparral habitats.
Asio otus long-eared owl	CSC, IUCN:LC (nesting)	–	Riparian bottomlands grown to tall willows and cottonwoods; also belts of live oak paralleling stream courses.
Athene cunicularia burrowing owl	BCC, CC, CSC, BLM:S, IUCN:LC (burrow sites & some wintering sites)	MSCP: (covered in all approved MSCP Subarea Plans)	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.
Baeolophus inornatus oak titmouse	BCC, ABC:WLBCC, IUCN:LC (nesting)	–	Nests primarily in tree cavities in oak trees, but also known to use sycamores.
Branta bernicla Brant	CSC, IUCN:LC (wintering and staging)	–	Brackish water marsh, lagoons, and estuarine environments where eel grass is prevalent.
Branta canadensis Canada goose	–	MSCP (covered in all approved MSCP Subarea Plans except Poway)	Salt marsh, freshwater marsh, grassland, agricultural fields.
Buteo regalis ferruginous hawk	BCC, CWL, IUCN:LC (wintering)	MSCP (covered in all approved MSCP Subarea Plans)	Open grasslands, sagebrush flats, desert scrub, low foothills, and fringes of pinyon–juniper habitats.
Buteo swainsoni Swainson's hawk	BCC, CT, BLM:S, IUCN:LC(nesting)	MSCP (covered in all approved MSCP Subarea Plans)	Inhabits grasslands, scrub, and agricultural habitats.
Calypte costae Costa's hummingbird	IUCN:LC (nesting)	–	Common and widespread breeder in a variety of habitats from desert scrublands, chaparral, sycamore, oak, and riparian woodlands.
Campylorhynchus brunneicapillus sandiegensis coastal cactus wren	BCC, CSC, USFS:S	MSCP: NENE, MSCP (covered in all approved MSCP Subarea Plans)	Coastal sage scrub with extensive stands of tall prickly pear or cholla cacti (*Opuntia* sp.).
Cardinalis cardinalis northern cardinal	CWL, IUCN:LC	–	Known to occasionally occur in the Tijuana River Valley.

Species[1]	Sensitivity Status[2]	Regional HCP/NCC Coverage[3]	Habitat
Charadrius montanus mountain plover	BCC, CSC, ABC:WLBCC, BLM:S, IUCN:NT (wintering)	MSCP (covered in all Approved MSCP Subarea Plans except Poway)	Associated with dirt or short growing agricultural fields and grassland. Prefers recently plowed or burned fields.
Charadrius nivosus nivosus western snowy plover	FT, BCC, CSC, ABC:WLBCC (nesting)	MSCP (covered in all Approved MSCP Subarea Plans except Poway) MHCP: OW	Sandy beaches, salt pond levees, and shores of large alkali lakes. Requires sandy, gravelly or friable soils for nesting.
Circus cyaneus northern harrier	CSC, IUCN:LC (nesting)	MSCP (covered in all approved MSCP Subarea Plans)	Coastal salt and fresh-water marsh. Nests and forages in grasslands, from salt grass in desert sink to mountain cienagas.
Cistothorus palustris clarkae Clark's marsh wren	CSC	–	Nests along the coast in coastal salt marsh, fresh water marsh, and areas of permanent water with reedy vegetation.
Coccyzus americanus (western DPS) western yellow-billed cuckoo	FT, BCC,CE, BLM:S, USFS:S, ABC:WLBCC (nesting)	–	Riparian forest nester, along the broad, lower flood-bottoms of larger river systems often mixed with cottonwoods, with lower story of blackberry, nettles, or wild grape.
Contopis cooperi olive-sided flycatcher	BCC, CSC, ABC:WLBCC, IUCN:NT (nesting)	–	An uncommon summer resident of coniferous woodlands in San Diego County.
Dendroica petechia yellow warbler	BCC, CSC (nesting)	–	A fairly common summer breeding resident found along mature riparian woodlands consisting of cottonwood, willow, alder, and ash trees. Restricted to this increasingly patchy habitat.
Elanus leucurus white-tailed kite	CFP, BLM:S, IUCN:LC (nesting)	–	Open grasslands, meadows, or marshes for foraging and isolated, dense-topped trees for nesting and perching.
Empidonax traillii extimus southwestern willow flycatcher	FE, CE, ABC:WLBCC (nesting)	MSCP: (covered in all approved MSCP Subarea Plans) MHCP: OW	Restricted to a few colonies in riparian woodlands scattered throughout southern California. Riparian forests are integral to this species' persistence.
Eremophila alpestris actia California horned lark	CWL, IUCN:LC	–	Found year-round in coastal strand, grasslands, and sandy desertsof San Diego County. Typically a disturbance regime speciesexploiting the open ground following plowed fields or fire in search of insects.
Falco columbarius merlin	CWL, IUCN:LC (wintering)	–	Marshes, deserts, seacoasts, near coastal lakes and lagoons, open woodlands, and fields. May roost in conifers.
Falco mexicanus prairie falcon	BCC, CWL, IUCN:LC (nesting)	–	Inhabits dry, open terrain, either level or hilly. Breeding sites located on cliffs.

Species[1]	Sensitivity Status[2]	Regional HCP/NCC Coverage[3]	Habitat
Falco peregrinus anatum American peregrine falcon	BCC, CFP, CDF:S (nesting)	MSCP: NENE, MSCP (covered in all approved MSCP Subarea Plans) MHCP	Coastal wetland areas, extensive riparian areas, and lakes.
Gelochelidon nilotica gull-billed tern	BCC, CSC, ABC:WLBCC, IUCN:LC (nesting colony)	–	Only nesting is in south San Diego Bay salt works on bare dirt along the tops of dikes.
Haematopus bachmani black oystercatcher	BCC, IUCN:LC, ABC:WLBCC (nesting)	–	Rocky shoreline around Point Loma and North Island.
Haliaeetus leucocephalus bald eagle	BCC, CE, CFP, BLM:S, CDF:S, IUCN:LC, USFS:S (nesting and wintering)	MSCP (covered in all approved MSCP Subarea Plans)	Occurs primarily near large lakes with open water. Also, known to nest in grasslands near small ponds.
Hydroprogne caspia Caspian tern	BCC, IUCN:LC (nesting colony)	–	Only nesting is in south San Diego Bay salt works on bare dirt along the tops of dikes.
Ixobrychus exilis least bittern	BCC, CSC, IUCN:LC (nesting)	–	Colonial nester in marshlands and borders of ponds and reservoirs that provide ample cover.
Lanius ludovicianus loggerhead shrike	BCC, CSC, IUCN:LC (nesting)	–	Uncommon year- round resident of San Diego County. Found in grassland, chaparral, desert, and desert edge scrub, particularly near dense vegetation that it uses for concealing and protecting the nest.
Passerculus sandwichensis rostratus large-billed savannah sparrow	, CSC (wintering)	MSCP (covered in all approved MSCP Subarea Plans except Poway) MHCP: OW	Found along beaches and shores with marsh habitat.
Laterallus jamaicensis coturniculus California black rail	BCC, CT, CFP, BLM:S, ABC:WLBCC, IUCN:NT	–	Inhabits freshwater marshes, wet meadows, and shallow margins of saltwater marshes bordering larger bays. Extirpated in San Diego County.
Numenius americanus long-billed curlew	BCC, CWL, ABC:WLBCC, IUCN:LC (nesting)	MSCP (covered in all Approved MSCP Subarea Plans except Poway)	Tidal mudflats, coastal strand, salt marshes, fallow agricultural fields, and grasslands along the coast. Uncommon migrant and winter visitor to San Diego County.
Nycticorax nycticorax black-crowned night heron	IUCN: LC (nesting colony)	–	Nests in tall, large trees in proximity to ponds, lakes, streams, or other water sources.
Oreothlypis luciae Lucy's warbler	BCC, CSC, BLM:S, IUCN:LC (nesting)	–	Nests in Borrego Valley mesquite bosque.

Species[1]	Sensitivity Status[2]	Regional HCP/NCC Coverage[3]	Habitat
Pandion haliaetus Osprey	CWL, CDF:S, IUCN:LC (nesting)	MHCP: OW	Ocean shore, bays, freshwater lakes, and larger streams.
Parabuteo unicinctus Harris' hawk	CDFW: WL, IUCN:LC (nesting)	–	Nests in tall oak and other tree species in eastern San Diego County near the desert and desert transition zone.
Passerculus sandwichensis beldingi Belding's savannah sparrow	CE	MSCP: (covered in all Approved MSCP Subarea Plans except Poway) MHCP: OW	Occurs primarily in grassland, saline emergent wetland, and wet meadow habitats.
Pelecanus occidentalis californicus California brown pelican	CFP, BLM:S, USFS:S, (nesting colony & communal roosts)	MSCP (covered in all approved MSCP Subarea Plans except Poway) MHCP: OW	Open ocean, coastal strand, harbors, bays, and estuaries.
Phalacrocorax auritus double-crested cormorant	CWL, IUCN:LC (nesting colony)	–	Nests along coast on sequestered islets. Usually on ground with sloping surface, or in tall trees along lake margins.
Picoides albolarvatus white-headed woodpecker	BCC, IUCN:LC (nesting)	–	Breeds in few locations in high elevation coniferous forests where sugar pine is dominant.
Picoides nuttallii Nuttall's woodpecker	–IUCN:LC(nesting)	–	Breeds throughout San Diego County (except in desert regions) in oak and riparian forests.
Piranga rubra summer tanager	CSC: IUCN:LC (nesting)	–	Nests in mature riparian vegetation where Fremont cottonwood (*Populus fremontii*) is a dominant species.
Plegadis chihi white-faced ibis	CWL, IUCN:LC (nesting colony)	MSCP (covered in all approved MSCP Subarea Plans except Poway) MHCP: OW	Shallow fresh-water marsh. Dense tule thickets for nesting interspersed with areas of shallow water for foraging.
Polioptila californica californica coastal California gnatcatcher	FT, CSC, ABC:WLBCC	MSCP (covered in all approved MSCP Subarea Plans) MHCP	Diegan coastal sage scrub dominated by California sagebrush (*Artemisia californica*) and flat-topped buckwheat (*Eriogonum fasciculatum*) below 2,500 feet elevation in Riverside County and below 1,000 feet elevation along the coastal slope; generally avoids steep slopes above 25% and dense, tall vegetation for nesting.
Progene subis purple martin	CSC, IUCN:LC (nesting)	–	Found throughout the United States but is rare in San Diego County. Restricted to mountain region of San Diego County. Nests in isolated snags with holes.
Pyrocephalus rubinus vermillion flycatcher	CSC, IUCN:LC (nesting)	–	Breeds in golf courses and areas with short grass, often near sources of water. Also nests in desert riparian areas.
Rallus obsoletus levipes light-footed Ridgway's rail	FE, CE, CFP, ABC :WLBCC	MSCP	Marsh and swamp, salt marsh, wetland. Found in salt marshes traversed by tidal sloughs, where cordgrass and pickleweed are the dominant vegetation. Requires dense growth of either pickleweed or cordgrass for nesting or escape cover; feeds on molluscs and crustaceans.

Species[1]	Sensitivity Status[2]	Regional HCP/NCC Coverage[3]	Habitat
Riparia riparia bank swallow	CT, BLM:S, IUCN:LC (nesting)	–	Colonial nester. Nests primarily in riparian and other lowland habitats west of the desert. Requires vertical banks/cliffs with fine- textured/sandy soils near streams, rivers, lakes, or ocean. Only known colony extirpated from San Diego County.
Rynchops niger black skimmer	BCC, CSC, ABC:WLBCC, IUCN:LC (nesting colony)	–	Nests in south San Diego Bay salt works on bare dirt along the tops of dikes.
Selasphorus sasin Allen's hummingbird	BCC, ABC:WLBCC, IUCN:LC (nesting)	–	Breeds in a slender strip along the coast primarily in the San Onofre State Beach area.
Sialia mexicana western bluebird	–	MSCP (covered in all Approved MSCP Subarea Plans except Poway)	Frequents open woodlands for foraging, but requires suitable roosting and nesting cavities usually in snags. Availability of snags may limit population density
Spinus lawrencei Lawrence's goldfinch	BCC, ABC:WLBCC, IUCN:LC (nesting)	–	Nests in areas with abundant food sources near meadows, creeks, oak and riparian woodland.
Spizella atrogularis black-chinned sparrow	BCC, ABC:WLBCC, IUCN:LC (nesting)	–	Nests in dry semi-open chaparral. Prefers areas with steep-chaparral covered slopes. Also nests in buckwheat and big sagebrush.
Spizella breweri Brewer's sparrow	BCC, IUCN:LC (nesting)	–	Nests in desert transition areas in the eastern part of San Diego County in big sagebrush habitat.
Spizellapasserina chipping sparrow	IUCN:LC (nesting)	–	Nests in coniferous forests.
Sterna elegans elegant tern	CWL, IUCN:NT (nesting colony)	MSCP (covered in all Approved MSCP Subarea Plans except Poway) MHCP (OW)	Estuarine and intertidal zones of beaches and mudflats for foraging, and beaches, mudflats, and lagoon shoreline for roosting habitat.
Sterna forsteri Forsters' tern	IUCN:LC (nesting colony)	–	Nests in south San Diego Bay salt works and other coastal sites in lightly vegetated sandy areas.
Sternula antillarum browni California least tern	FE,CE, CFP, ABC:WLBCC (nesting colony)	MSCP: (covered in all Approved MSCP Subarea Plans except Poway) MHCP	Colonial breeder on bare or sparsely vegetated, flat substrates: sand beaches, alkali flats, land fills, or paved areas.
Strix occidentalis occidentalis California spotted owl	FP, BCC, CSC, BLM:S, USFS:S, IUCN:NT	–	Nests in large oak and coniferous trees in mountainous areas, Prefers closed canopy forests with nearby permanent water, and an abundant source of woodrats (*Neotoma* species).

Species[1]	Sensitivity Status[2]	Regional HCP/NCC Coverage[3]	Habitat
Toxostoma bendirei Bendire's thrasher	BCC, CSC, BLM:S, ABC:WLBCC, IUCN:VU	–	Historically nested in Ocotillo Wells.
Toxostoma crissale crissal thrasher	CSC, IUCN:LC	–	Nests in Borrego Valley mesquite bosque.
Toxostoma lecontei Le Conte's thrasher	BCC, CSC, ABC:WLBCC, IUCN:LC	–	Nests in desert washes in Anza-Borrego and Clark Dry Lake.
Vireo bellii pusillus least Bell's vireo	FE, CE, ABC:WLBCC, IUCN:NT (nesting)	MSCP: (covered in all approved MSCP Subarea Plans) MHCP: OW	Riparian woodland with understory of dense young willows or mulefat and willow canopy. Nests often placed along internal or external edges of riparian thickets.
Vireo vicinior gray vireo	BCC, CSC, ABC:WLBCC, BLM:S, USFS:S, IUCN:LC (nesting)	–	Nests in dry chaparral habitat (chamise and redshank are important species) along primarily on south-facing slopes.
Xanthocephalus xanthocephalus yellow-headed blackbird	CSC, IUCN:LC (nesting)	–	Nests in deeply flooded freshwater marshes. Only confirmed nesting was in Boulevard at Tule Lake.
Mammals			
California leaf-nosed bat *Macrotus californicus*	CSC, BLM:S, IUCN:LC, WBWG:H	–	Desert riparian, desert wash, desert scrub, desert succulent scrub, alkali scrub, and palm oasis habitats.
western yellow bat *Lasiurus xanthinus*	CSC, IUCN:LC, WBWG:H	–	Found in valley foothill riparian, desert riparian, desert wash, and palm oasis habitats. Roosts in trees, particularly palms forages over water and among trees.
Antrozous pallidus pallid bat	CSC, BLM:S, IUCN:LC, USFS:S, WBWG:H	–	Deserts, grasslands, shrublands, woodlands, and forests. Most common in open, dry habitats with rocky areas for roosting.
Chaetodipus californicus femoralis Dulzura pocket mouse	–	MSCP (Poway MSCP only)	Variety of habitats including coastal scrub, chaparral, and grassland in San Diego County.
Chaetodipus fallax fallax northwestern San Diego pocket mouse	–	MSCP (Poway MSCP only)	Coastal scrub, chaparral, grasslands, and sagebrush in western San Diego County.
Chaetodipus fallax pallidus pallid San Diego pocket mouse	–	–	Desert wash, desert scrub, desert succulent scrub, and pinyon- juniper in eastern San Diego County. Sandy herbaceous areas, usually in association with rocks or coarse gravel.
Choeronycteris mexicana Mexican long-tongued bat	CSC, IUCN:NT, WBWG:H	–	Occasionally found in San Diego County, which is on the periphery of their range. Feeds on nectar and pollen of night- blooming succulents. Roosts in relatively well-lit caves and around buildings.

Species[1]	Sensitivity Status[2]	Regional HCP/NCC Coverage[3]	Habitat
Corynorhinus townsendii Townsend's big-eared bat	CSC, BLM:S, IUCN:LC, USFS:S, WBWG:H	–	Throughout California in a wide variety of habitats. Most common in mesic sites. Roosts in the open, hanging from walls and ceilings.
Dipodomys merriami collinus earthquake Merriam's kangaroo rat	–	–	Occurs in a variety of shrub-land type habitats including sage scrub and chaparral.
Dipodomys stephensi Stephens' kangaroo rat	FT, CT, IUCN:VU	–	Primarily annual and perennial grasslands, but also occurs in coastal scrub and sagebrush with sparse canopy cover. Prefers buckwheat, chamise, brome grass, and filaree.
Euderma maculatum spotted bat	CSC, BLM:S, IUCN:LC, WBWG:H	–	Associated with prominent rock features; extreme, low desert habitats to high elevation forests.
Eumops perotis californicus western mastiff bat	CSC, BLM:S, WBWG:H	–	Many open, semi-arid to arid habitats, including conifer and deciduous woodlands, coastal scrub, grasslands, and chaparral. Roosts in crevices in cliff faces, high buildings, trees, and tunnels.
Lasionycteris noctivagans silver-haired bat	IUCN:LC, WBWG:M	–	Primarily a coastal and montane forest dweller feeding over streams, ponds, and open brushy areas.
Lasiurus blossevillii western red bat	CSC, IUCN:LC, WBWG:H	–	Prefers habitat edges and mosaics with trees that are protected from above and open below with open areas for foraging. Roosts primarily in trees, 2–40 feet above ground, from sea level up through mixed conifer forests.
Lasiurus cinereus hoary bat	IUCN:LC, WBWG:M	–	Prefers open habitats or habitat mosaics, with access to trees for cover and open areas or habitat edges for feeding. Roosts in dense foliage of medium to large trees.
Lepus californicus bennettii San Diego black-tailed jackrabbit	–	–	Typical habitats include early stages of chaparral, open coastal sage scrub, and grasslands near the edges of brush.
Myotis ciliolabrum western small-footed myotis	BLM:S, IUCN:LC, WBWG:M	–	Desert scrub, semi-arid regions, and rocky canyons. it roosts under tree bark or bridges and in buildings.
Myotis evotis long-eared myotis	BLM:S, IUCN:LC, WBWG:M	–	Feeds along habitat edges, in open habitats, and over water. This species roosts in buildings, crevices, spaces under bark, and snags.
Myotis thysanodes fringed myotis	BLM:S, IUCN:LC, USFS:S, WBWG:H	–	Desert scrub, semi-arid regions, and rocky canyons. it roosts under tree bark or bridges and in buildings.
Myotis volans long-legged myotis	IUCN:LC, WBWG:H	–	Most common in woodland and forest habitats above 4000 feet. Trees are important day roosts; caves and mines are night roosts.
Myotis yumanensis Yuma myotis	BLM:S, IUCN:LC, WBWG:LM	–	Desert scrub, semi-arid regions, and rocky canyons. It roosts under tree bark or bridges and in buildings.
Neotoma albigula venusta Colorado Valley woodrat	–	–	Brushland and rocky cliffs with shallow caves.

Species[1]	Sensitivity Status[2]	Regional HCP/NCC Coverage[3]	Habitat
Neotoma lepida intermedia San Diego desert woodrat	CSC	–	Common to abundant in Joshua tree, piñyon-juniper, mixed and chamise- redshank chaparral, sagebrush, and most desert habitats.
Nyctinomops femorosaccus pocketed free-tailed bats	CSC, IUCN:LC, WBWG:M	–	Variety of arid areas in southern California including: pine-juniper woodlands, desert scrub, palm oasis, desert wash, and desert riparian.
Nyctinomops macrotis big free -tailed bat	CSC, IUCN:LC, WBWG:MH	–	Rugged, rocky habitats in arid landscapes; found in desert scrub, woodlands, and evergreen forests.
Odocoileus hemionus southern mule deer	–	MSCP (covered in all approved MSCP Subarea Plans)	Coastal sage scrub, chaparral, riparian woodland, oak woodland.
Onychomys torridus ramona southern grasshopper mouse	CSC	–	This species inhabits a variety of low, open and semi-open scrub habitats, including coastal sage scrub, mixed chaparral, low sagebrush, riparian scrub, and annual grassland with scattered shrubs.
Ovis canadensis nelsoni pop. 2 peninsular bighorn sheep DPS	FE, CT, CFP	–	Optimal habitat includes steep walled canyons and ridges bisected by rocky or sandy washes, with available water.
Perognathus longimembris brevinasus Los Angeles pocket mouse	CSC,	–	Open ground with fine sandy soils. May not dig extensive burrows, hiding under weeds and dead leaves instead.
Perognathus longimembris internationalis Jacumba pocket mouse	CSC	–	Desert riparian, desert scrub, desert wash, coastal scrub, and sagebrush.
Perognathus longimembris pacificus Pacific pocket mouse	FE, CSC	–	Plant communities suitable for the Pacific pocket mouse consist of shrublands with firm, fine-grain, sandy substrates in the immediate vicinity of the ocean. These communities include coastal strand, coastal dunes, river alluvium, and coastal sage scrub growing on marine terraces.
Puma concolor mountain lion	CC	MSCP (covered in all approved MSCP Subarea Plans)	Forest and shrubland habitats throughout California where deer, their primary prey, are found.
Taxidea taxus American badger	CSC, IUCN:LC	MSCP (covered in all approved MSCP Subarea Plans)	Coastal sage scrub, mixed chaparral, grassland, oak woodland, chamise chaparral, mixed conifer, pinyon– juniper, desert scrub, desert wash, montane meadow, open areas, and sandy soils.

[1] Avian species nomenclature follows the American Ornithologists Union checklist found at: http://checklist.aou.org/taxa/. Non-avian species nomenclature follows the California Department of Fish and Wildlife (CDFW) Online Special Animals List at https://www.dfg.ca.gov/biogeodata/cnddb/plants_and_animals.asp.

[2] Sensitivity Codes

Federal – U.S. Fish and Wildlife Service (USFWS)

FE = Federally endangered
FT = Federally threatened
FPT = Federally proposed threatened
FC = Federal candidate
BCC = Federal Birds of Conservation Concern

State – California Department of Fish and Wildlife (CDFW)

CE = California endangered
CT = California threatened
CC = California candidate
CCT = California candidate threatened
CCE = California candidate endangered
CFP = California fully protected species

CSC = California species of special concern
CWL = California watch list

IUCN – International Union for Conservation of Nature

DD = Data Deficient
EN = Endangered
LC = Least Concern
NT = Near Threatened
VU = Vulnerable

ABC – American Bird Conservancy

WLBCC = U.S. Watch List of Birds of Conservation Concern

AFS – American Fisheries Society

EN = Endangered
VU = Vulnerable

BLM – Bureau of Land Management

S = Sensitive

CDF – California Department of Forestry and Fire Protection

S = Sensitive

USFS – U.S. Forest Service

S = Sensitive

WBWG – Western Bat Working Group

H = High Priority
LM = Low-Medium Priority
M = Medium Priority
MH = Medium-High Priority

Xerces Society

CI = Critically Imperiled

[3] HC/NCCP coverage is based on the cities of Chula Vista, La Mesa, Poway, and San Diego and the County of San Diego (South County) that have adopted Subarea Plans (i.e., NCCP/HCP) under the San Diego County MSCP and the City of Carlsbad that has an adopted Subarea Plan (i.e., NCCP/HCP) under the MHCP. Codes are as follows:

MSCP = Multiple Species Conservation Program covered species

MHCP = Multiple Habitat Conservation Program covered species

NE = MSCP or MHCP narrow endemic species

OW = Obligate Wetland Species

4.4 APPENDIX D-4 DRAFT NATURAL COMMUNITY CONSERVATION PLANS AND HABITAT CONSERVATION PLANS

This appendix describes unapproved and unadopted (i.e., draft) plans that do not require analysis under CEQA (see CEQA Guidelines Section 15125(d)(e)) in the San Diego Region. Discussion of these draft plans is included for additional context on the NCCP/HCPs in the San Diego region.

4.4.1 Draft San Diego North County Multiple Species Conservation Program Subregional Plan

The Draft North County MSCP plan is in progress and expected for completion in 2026. The County of San Diego produced a preliminary administrative draft of the plan for agency and stakeholder review in November 2006. A second public review of the draft plan occurred in 2009. The Draft North County MSCP would complement the South County MSCP Subarea Plan adopted by the County of San Diego Board of Supervisors in 1997. In March 2021, the County re- instated the third planning agreement with the U.S. Fish and Wildlife Service and California Department of Fish and Game for both the North and East County MSCP.

The study area for this draft plan encompasses about 296,677 acres of unincorporated land roughly in the areas north of the San Dieguito River, Elfin Forest and Harmony Grove, north of MCB Camp Pendleton, DeLuz, Fallbrook, Rainbow, Pauma Valley, Lilac, Valley Center, Rancho Guejito, and the majority of Ramona. The Subarea Plan is expected to cover 63 species.

4.4.2 Draft San Diego East County Multiple Species Conservation Program Subregional Plan

The Draft East County MSCP plan is in progress, and the planning agreement was re-instated in March 2021. Development started in the fall of 2004. The East County MSCP would complement the South County MSCP Subarea Plan adopted by the County of San Diego Board of Supervisors in 1997. A preliminary draft map was released in December 2008, but a draft plan has not been released.

The Draft East County MSCP study area covers 1,551,600 acres in eastern San Diego County. Native American Reservations are excluded from the study area. The East County MSCP Subarea Plan will cover the backcountry communities of Central Mountain, Cuyamaca, Descanso, Pine Valley, Desert/Borrego Springs, Julian, Mountain Empire, Boulevard, Jacumba, Lake Morena/Campo, Potrero, Tecate, portions of Dulzura, and Palomar/North Mountain. The East County MSCP proposes to cover up to 254 species.

References

County of San Diego. 2025. North County Plan. https://www.sandiegocounty.gov/content/sdc/pds/mscp/nc/overview.html. Accessed 2025.

County of San Diego. 2025. East County Plan. https://www.sandiegocounty.gov/content/sdc/pds/mscp/ec.html. Accessed 2025.

4.5 APPENDIX D-5 LAND USE CATEGORIES

The table below details which land use classifications are categorized as undeveloped and developed (i.e., spaced rural residential land use and other developed land uses) for purposes of biological resources analysis in this EIR.

Land Use Code	Land Use Description	Regional Growth Analysis Category
1000	Spaced Rural Residential	Developed – Space Rural Residential
1100	Single Family Residential	Developed – Other Developed Land Use
1110	Single Family Detached	Developed – Other Developed Land Use
1120	Single Family Multiple-Units	Developed – Other Developed Land Use
1190	Single Family Residential Without Units	Developed – Other Developed Land Use
1200	Multi-Family Residential	Developed – Other Developed Land Use
1280	Single Room Occupancy Units (SRO's)	Developed – Other Developed Land Use
1290	Multi-Family Residential Without Units	Developed – Other Developed Land Use
1300	Mobile Home Park	Developed – Other Developed Land Use
1401	Jail/Prison	Developed – Other Developed Land Use
1402	Dormitory	Developed – Other Developed Land Use
1403	Military Barracks	Developed – Other Developed Land Use
1404	Monastery	Developed – Other Developed Land Use
1409	Other Group Quarters Facility	Developed – Other Developed Land Use
1501	Hotel/Motel (Low-Rise)	Developed – Other Developed Land Use
1502	Hotel/Motel (High-Rise)	Developed – Other Developed Land Use
1503	Resort	Developed – Other Developed Land Use
2001	Heavy Industry	Developed – Other Developed Land Use
2101	Industrial Park	Developed – Other Developed Land Use
2103	Light Industry - General	Developed – Other Developed Land Use
2104	Warehousing	Developed – Other Developed Land Use
2105	Public Storage	Developed – Other Developed Land Use
2201	Extractive Industry	Developed – Other Developed Land Use
2301	Junkyard/Dump/Landfill	Developed – Other Developed Land Use
4101	Commercial Airport	Developed – Other Developed Land Use
4102	Military Airport	Developed – Other Developed Land Use
4103	General Aviation Airport	Developed – Other Developed Land Use
4104	Airstrip	Developed – Other Developed Land Use
4111	Rail Station/Transit Center	Developed – Other Developed Land Use
4112	Freeway	Developed – Other Developed Land Use
4113	Communications and Utilities	Developed – Other Developed Land Use
4114	Parking Lot - Surface	Developed – Other Developed Land Use
4115	Parking Lot - Structure	Developed – Other Developed Land Use
4116	Park and Ride Lot	Developed – Other Developed Land Use

Land Use Code	Land Use Description	Regional Growth Analysis Category
4117	Railroad Right of Way	Developed – Other Developed Land Use
4118	Road Right of Way	Developed – Other Developed Land Use
4119	Other Transportation	Developed – Other Developed Land Use
4120	Marine Terminal	Developed – Other Developed Land Use
5001	Wholesale Trade	Developed – Other Developed Land Use
5002	Regional Shopping Center	Developed – Other Developed Land Use
5003	Community Shopping Center	Developed – Other Developed Land Use
5004	Neighborhood Shopping Center	Developed – Other Developed Land Use
5005	Specialty Commercial	Developed – Other Developed Land Use
5006	Automobile Dealership	Developed – Other Developed Land Use
5007	Arterial Commercial	Developed – Other Developed Land Use
5008	Service Station	Developed – Other Developed Land Use
5009	Other Retail Trade and Strip Commercial	Developed – Other Developed Land Use
6001	Office (High-Rise)	Developed – Other Developed Land Use
6002	Office (Low-Rise)	Developed – Other Developed Land Use
6003	Government Office/Civic Center	Developed – Other Developed Land Use
6101	Cemetery	Developed – Other Developed Land Use
6102	Religious Facility	Developed – Other Developed Land Use
6103	Library	Developed – Other Developed Land Use
6104	Post Office	Developed – Other Developed Land Use
6105	Fire/Police Station	Developed – Other Developed Land Use
6108	Mission	Developed – Other Developed Land Use
6109	Other Public Services	Developed – Other Developed Land Use
6501	UCSD/VA Hospital/Balboa Hospital	Developed – Other Developed Land Use
6502	Hospital - General	Developed – Other Developed Land Use
6509	Other Health Care	Developed – Other Developed Land Use
6701	Military Use	Developed – Other Developed Land Use
6702	Military Training	Developed – Other Developed Land Use
6703	Weapons Facility	Developed – Other Developed Land Use
6800	Schools	Developed – Other Developed Land Use
6801	SDSU/CSU San Marcos/UCSD	Developed – Other Developed Land Use
6802	Other University or College	Developed – Other Developed Land Use
6803	Junior College	Developed – Other Developed Land Use
6804	Senior High School	Developed – Other Developed Land Use
6805	Junior High School or Middle School	Developed – Other Developed Land Use
6806	Elementary School	Developed – Other Developed Land Use
6807	School District Office	Developed – Other Developed Land Use
6809	Other School	Developed – Other Developed Land Use
7201	Tourist Attraction	Developed – Other Developed Land Use

Land Use Code	Land Use Description	Regional Growth Analysis Category
7202	Stadium/Arena	Developed – Other Developed Land Use
7203	Racetrack	Developed – Other Developed Land Use
7204	Golf Course	Developed – Other Developed Land Use
7205	Golf Course Clubhouse	Developed – Other Developed Land Use
7206	Convention Center	Developed – Other Developed Land Use
7207	Marina	Developed – Other Developed Land Use
7208	Olympic Training Center	Developed – Other Developed Land Use
7209	Casino	Developed – Other Developed Land Use
7210	Other Recreation - High	Developed – Other Developed Land Use
7211	Other Recreation - Low	Developed – Other Developed Land Use
7601	Park - Active	Developed – Other Developed Land Use
7603	Open Space Park or Preserve	Undeveloped
7604	Beach - Active	Developed – Other Developed Land Use
7605	Beach - Passive	Undeveloped
7606	Landscape Open Space	Developed – Other Developed Land Use
7607	Residential Recreation	Developed – Other Developed Land Use
7609	Undevelopable Natural Area	Undeveloped
8000	Agriculture	Developed – Other Developed Land Use
8001	Orchard or Vineyard	Developed – Other Developed Land Use
8002	Intensive Agriculture	Developed – Other Developed Land Use
8003	Field Crops	Developed – Other Developed Land Use
9101	Vacant and Undeveloped Land	Undeveloped
9200	Water	Undeveloped
9201	Bay or Lagoon	Undeveloped
9202	Lake/Reservoir/Large Pond	Undeveloped
9300	Indian Reservation	Developed – Other Developed Land Use
9400	Public/Semi-Public	Developed – Other Developed Land Use
9501	Residential Under Construction	Developed – Other Developed Land Use
9502	Commercial Under Construction	Developed – Other Developed Land Use
9503	Industrial Under Construction	Developed – Other Developed Land Use
9504	Office Under Construction	Developed – Other Developed Land Use
9505	School Under Construction	Developed – Other Developed Land Use
9506	Road Under Construction	Developed – Other Developed Land Use
9507	Freeway Under Construction	Developed – Other Developed Land Use
9700	Mixed Use	Developed – Other Developed Land Use

4.6 APPENDIX D-6 PROJECT-BY-PROJECT IMPACTS ON VEGETATION COMMUNITIES FOR EACH HORIZON YEAR

Table D-6-1 Estimated Direct Impacts To Vegetation Communities For Each Transportation Network Improvement (Acres) Up To The Year 2035[1]

Project[1]	Riparian and Wetlands							Riparian and Wetlands Total	Uplands							Uplands Total	Total[2]
	Beach/ Coastal Dunes/ Saltpan/Mudflats	Marsh	Meadows and Seeps	Open Water	Riparian Forest/ Woodland	Riparian Scrub	Vernal Pools		Chaparral	Coastal Scrub	Desert Dunes	Desert Scrub	Oak Woodl and	Grasslands	Forests/ Woodland		
Active Transportation																	
City Heights/Fairmount Corridor									0.2	0.4							**0.6**
Coastal Rail Trail Oceanside		0.1															**0.1**
Coastal Rail Trail San Diego – Del Mar to Sorrento via Carmel Valley										0.3							**0.3**
Coastal Rail Trail San Diego – UTC to Rose Canyon					0.1	0.9			0.1	0.2				0.9			**3.1**
Coastal Rail Trail Encinitas to Carlsbad		0.4															**0.4**
Green Line (Santee to Downtown)		0.4		1.1	4.7	1.3									1.1		**8.6**
I-15 Bikeway - Camino del Rio South to Rancho Mission Road: Off-Street					0.1												**0.1**
Inland Rail Trail: Phase 4														0.2			**0.2**
Inland Rail Trail: Vista to Oceanside					0.2					1.3				0.3	0.1		**1.9**
Pacific Beach to East Mission Bay				0.1													**0.1**
San Diego River Trail—Bridge connection (Sefton Field to Mission Valley YMCA)					0.4												**0.4**
San Diego River Trail—I-805 to Fenton Parkway		0.1			0.3										0.1		**0.5**
San Diego River Trail – Mast Park to Lakeside Baseball Park										0.1				0.9			**1.0**
San Diego River Trail: Carlton Oaks Segment					2.3	0.3											**2.6**
Santee - El Cajon Corridor - Forester Creek Connection					0.3	0.1											**0.4**
Complete Corridors																	
I-15 Managed Lanes					0.1					2.8					1.1		**4.0**
I-5/I-805 ML Connector						0.1											**0.1**
I-8					0.1				0.8								**0.9**
I-805 Managed Lanes					1.3					3.0							**4.3**
I-805 Multi-Use Path Bridge Main Street to Palm Avenue					0.1												**0.1**
SR 11/Otay Mesa East POE (Enrico Fermi to Mexico) to OME POE						0.3								17.3			**17.6**
SR-15 Managed Lanes										0.4							**0.4**
SR 52 Managed Lanes					6.1				9.4	8.4				15.1			**39.0**

Project[1]	Riparian and Wetlands							Riparian and Wetlands Total	Uplands							Uplands Total	Total[2]
	Beach/ Coastal Dunes/ Saltpan/Mudflats	Marsh	Meadows and Seeps	Open Water	Riparian Forest/ Woodland	Riparian Scrub	Vernal Pools		Chaparral	Coastal Scrub	Desert Dunes	Desert Scrub	Oak Woodl and	Grasslands	Forests/ Woodland		
SR 52 Operational Improvements					0.7				9.3	7.2				6.3			**23.5**
SR 67					0.6				2.6	3.2			2.0	0.5			**8.9**
SR 76					1.4	2.6			0.1	10.7				2.4			**17.2**
SR 78 Managed Lanes						0.2								1.0			**1.2**
SR 79					1.5									3.9			**5.4**
Transit																	
Blue Line (San Ysidro to UTC)		0.1		0.7	0.9	0.5											**2.2**
Orange Line (El Cajon to Downtown)										2.0							**2.0**
Regional Rail 398		23.4		6.5	16.4	3.7			12.2	8,5				18.1			
Regional Rail 598		11.3		9.1	16.4	4.8			12.2	8.5				18.1			**80.4**
SPRINTER (Oceanside to Escondido		0.1				0.7				1.4				3.9			**6.1**

[1] Only includes transportation network improvements that will result in direct impacts to undeveloped vegetation communities.

[2] Acreages have been rounded after summation.

Table D-6-2 Estimated Direct Impacts To Vegetation Communities For Each Transportation Network Improvement (Acres), 2036- 2050[1]

Project[1]	Riparian and Wetlands							Riparian and Wetlands Total	Uplands							Uplands Total	Total[2]
	Beach/ Coastal Dunes/ Saltpan/Mudflats	Marsh	Meadows and Seeps	Open Water	Riparian Forest/ Woodland	Riparian Scrub	Vernal Pools		Chaparral	Coastal Sage Scrub	Desert Dunes	Desert Scrub	Oak Woodland	Grasslands	Forests/ Woodlands		
Active Transportation																	
Bear Valley Bikeway					0.4												**0.4**
Camp Pendleton Trail					0.1	0.6				1.0							**0.8**
I-15 Bikeway—Via Rancho Parkway to Citracado Parkway						0.1											**0.1**
Chollas Creek Bikeway: North Fork				0.3		0.4				3.2							**3.9**
Coastal Rail Trail San Diego—UTC to Rose Canyon					0.1	0.1								0.2			**0.4**
North Coast Bike Trail		0.2		0.5													**0.7**
San Diego River Bikeway Connections					0.1	0.1											**0.2**
San Luis Rey River Trail				0.5	6.6	2.0				0.2							**9.3**
San Ysidro to Otay Mesa Connector										1.4							**1.4**
Saturn Boulevard Bikeway		0.3															**0.3**
SR 125 Connector—Bonita Road to U.S.–Mexico Border						0.4				0.3				17.3			**18.0**
SR 52 Bikeway—I-5 to Santo Road					2.4				1.2	1.5				0.3			**5.4**
SR 67 Bikeway—Lakeside to Ramona					0.3				1.3	0.9				1.3			**3.8**
I-15 Bikeway – Murphy Canyon Road to Affinity Court														0.2			**0.2**
Complete Corridors																	
I-5 Managed Lanes						0.1									1.1		**1.2**
I-805 Connector—Bonita Road to Floyd Ave										0.3							**0.3**
I-805 Connector—Bonita Road to H Street										1.0							**1.0**
I-15/SR 52 ML Connector														0.2			**0.2**
I-15 Managed Lanes					0.1					2.4							**2.5**
I-8					0.1				0.8								**0.9**
I-805 Managed Lanes					1.3					2.3							**3.6**
SR 15 Managed Lanes										0.4							**0.4**
SR 52 Managed Lanes					6.1				9.4	8.4				15.1			**39.0**
SR 56 Managed Lanes						1.0				2.8				9.9			**13.7**
SR 67					0.6				2.6	3.2			2.0	0.5			**8.9**
SR 76			0.3	0.1	11.0	5.6			5.0	20.6			24.8	16.0	2.4		**85.8**
SR 78					0.2				1.4	2.8			1.2	5.3			**10.9**
SR 78 Managed Lanes						0.3								1.0			**1.3**
SR 79			0.7	0.1	3.8	0.3			2.7	3.8			11.0	24.8			**47.2**
SR 905 Corridor														1.2			**1.2**
SR 94					3.8	0.9			12.2	12.1				3.2			**32.2**
SR 94 Multi-Use Pathway					1.8					0.7				0.3			**2.8**

Project[1]	Riparian and Wetlands							Riparian and Wetlands Total	Uplands							Uplands Total	Total[2]
	Beach/ Coastal Dunes/ Saltpan/Mudflats	Marsh	Meadows and Seeps	Open Water	Riparian Forest/ Woodland	Riparian Scrub	Vernal Pools		Chaparral	Coastal Sage Scrub	Desert Dunes	Desert Scrub	Oak Woodland	Grasslands	Forests/ Woodlands		
Transit																	
Light Rail 582				0.3	0.3	1.1				2.8							**4.5**
Blue Line (San Ysidro to UCT)		0.1		0.7	0.9	0.5											**2.2**
Green Line (Santee to Downtown)		0.3		1.1	4.7	1.3									1.1		**8.5**
Orange Line (El Cajon to Downtown)										2.0							**2.0**
Regional Rail 398		15.6		5.1	4.6	2.7			2.4	1.9				7.0			**39.3**
Regional Rail 598		15.5		9.2	4.6	9.4			2.9	2.0				7.0			**50.6**
SPRINTER Oceanside to Escondido		0.1			1.3	1.8				1.4							**4.6**

[1] Only includes transportation network improvements that will result in direct impacts to undeveloped vegetation communities.

[2] Acreages have been rounded after summation.

4.7 APPENDIX D-7 IMPACTED LISTED PLANT SPECIES

Table D-7-1 Impacted Listed Plant Species within the San Diego Region Up to the Year 2035

Regional Growth and Land Use Change / Transportation Network Improvement[2]	Vernal Pool Species[1]					Wetland/ Riparian Species[1]				Uplands Species[1]														
	San Diego Button-Celery	Otay Mesa mint	Spreading navarretia	California Orcutt grass	San Diego mesa mint	Salt marsh bird's-beak	Willowy monardella	Mojave tarplant	San Berardino blue grass	San Diego thorn-mint	San Diego ambrosia	Coastal dunes milk-vetch	Encinitas baccharis	Nevin's barbery	Thread-leaved brodiaea	Orcut's spine flower	Otay tarplant	Short-leaved dudleya	Mexican flannelbush	Orcutt's hazardia	Peirson' s milk-vetch	Gander's ragwort	Small-leaved rose	Dehesa nolina
2035 Regional Growth and Land Use Change	X*	X*	X*		X*		X*			X, X*	X, X*	X*	X*	X*	X, X*	X*	X, X*	X*	X*		X*		X*	X*
Active Transportation																								
Bayshore Bikeway Segment 1							X*					X*								X*				
Bayshore Bikeway Upgrades: Off-Street Coronado							X*					X*								X*				
Bayshore Bikeway: Segment 8B - Palomar Street to Main Street						X*						X*								X*				
Coastal Rail Trail Oceanside						X*	X*					X*								X*				
Coastal Rail Trail San Diego - Carmel Valley to Roselle via Sorrento						X*	X*			X*	X*	X*	X*		X*	X*		X*	X*	X*			X*	X*
Coastal Rail Trail San Diego - Del Mar to Sorrento via Carmel Valley						X*	X*			X*	X*	X*	X*	X*	X*	X*		X*	X*	X*			X*	X*
Coastal Rail Trail San Diego - Mission Sorrento via Carmel Valley							X*					X*		X*						X*				
Coastal Rail Trail San Diego - Mission Bay (Clairemont to Tecolote)							X*					X*		X*						X*				
Coastal Rail Trail: Carlsbad						X*	X*			X*	X*	X*			X*	X*			X*	X*				
Coastal Rail Trail: Encinitas to Carlsbad						X*	X*			X*	X*x	X*		X*	X*	X*		X*		X*			X*	
I-805 Multi-Use Path Bridge Main Street to Palm Avenue						X*	X*			X*	X*	X*	X*	X*	X*	X*		X*	X*	X*			X*	X*
Inland Rail Trail: Phase 4										X*	X*	X*		X*	X*					X*				
Inland Rail Trail: Vista to Oceanside						X*	X*				X*	X*			X*	X*		X*	X*	X*			X*	
North Mission Bay Drive to Rose Creek Bike Path							X*				X*	X*		X*						X*			X*	X*
San Diego River Trail - Bridge connection (Sefton Field to Mission Valley YMCA)							X*			X*	X*	X*			X*					X*				
San Diego River Trail - I-805 to Fenton Parkway						X*	X*			X*	X*	X*		X*	X*	X*			X*	X*				
San Diego River Trail - Mast Park to Lakeside Baseball Park						X*	X*			X*	X*	X*		X*	X*	X*		X*	X*	X*				
San Diego River Trail: Carlton Oaks Segment						X*	X*			X*	X*	X*		X*	X*					X*			X*	
Santee - El Cajon Corridor - Forester Creek Connection						X*	X*			X*	X*	X*		X*	X*					X*				
Sweetwater Bikeway Ramp							X*					X*								X*				

Regional Growth and Land Use Change / Transportation Network Improvement[2]	Vernal Pool Species[1]					Wetland/ Riparian Species[1]				Uplands Species[1]														
	San Diego Button-Celery	Otay Mesa mint	Spreading navarretia	California Orcutt grass	San Diego mesa mint	Salt marsh bird's-beak	Willowy monardella	Mojave tarplant	San Berardino blue grass	San Diego thorn-mint	San Diego ambrosia	Coastal dunes milk-vetch	Encinitas baccharis	Nevin's barbery	Thread-leaved brodiaea	Orcut's spine flower	Otay tarplant	Short-leaved dudleya	Mexican flannelbush	Orcutt's hazardia	Peirson' s milk-vetch	Gander's ragwort	Small-leaved rose	Dehesa nolina
City Heights/Fairmount Corridor							X*			X*	X*	X*	X*	X*	X*	X*		X*	X*	X*			X*	X*
Coastal Rail Trail Del Mar							X*					X*								X*				
Coastal Rail Trail Encinitas												X*		X*	X*	X*			X*	X*				
Coastal Rail Trail San Diego - UTC to Rose Canyon							X*			X*	X*	X*	X*	X*	X*	X*		X*	X*	X*			X*	X*
El Prado: Cross-Park												X*								X*				
Harbor Drive (Downtown to Ocean Beach)							X*					X*								X*				
I-15 Bikeway - Camino del Rio South to Rancho Mission Road: Off-Street						X*	X*			X*	X*	X*		X*	X*	X*		X*		X*			X*	
Lemon Grove to Imperial Bikeway																				X*				
Ocean Beach to Mission Bay						X*	X*													X*				
Pacific Beach to East Mission Bay							X*													X*				
SR 52 Bikeway - SR 52/Mast Drive to San Diego River Trail										X*	X*				X*					X*				
Complete Corridors																								
I-15 Managed Lanes						X*	X*			X*	X*	X*	X*	X*	X*	X*		X*	X*	X*			X*	X*
I-5 Managed Lanes						X*	X*			X*	X*	X*		X*	X*	X*		X*	X*	X*			X*	
I-805 Managed Lanes							X*			X*	X*	X*	X*	X*	X*	X*		X*	X*	X*			X*	X*
SR 15 Managed Lanes							X*			X*	X*	X*		X*	X*	X*		X*		X*			X*	
SR 52 Managed Lanes							X*			X*	X*	X*	X*	X*	X*	X*		X*	X*	X*			X*	X*
SR 78 Managed Lanes						X*	X*	X*		X*	X*	X*	X*	X*	X*	X*		X*	X*	X*			X*	X*
I-15 @ Clairemont Mesa Boulevard DAR							X*			X*	X*	X*		X*	X*	X*		X*		X*			X*	
I-15 @ SDSU Mission Valley						X*														X*				
SR 11/Otay Mesa East POE (Enrico Fermi to Mexico) to OME POE							X*			X*	X*			X*	X*		X*			X*				
I-5/SR 78 Interchange/Arterial Improvements						X*	X*	X*						X*	X*	X*			X*	X*				
SR 94/SR 125 Interchange/Arterial Improvements															X*					X*				
I-15/I-805 ML Connector							X*			X*	X*	X*		X*	X*	X*		X*		X*			X*	
I-15/SR 78 ML Connector												X*		X*	X*					X*			X*	
I-5/I-805 ML Connector						X*	X*			X*	X*				X*	X*		X*		X*				
I-5/SR 78 ML Connector						X*						X*	X*	X*	X*	X*			X*	X*			X*	X*
SR 52 Operational Improvements							X*			X*	X*	X*	X*	X*	X*	X*		X*	X*	X*			X*	X*
SR 67							X*			X*	X*	X*	X*	X*	X*	X*		X*		X*			X*	X*
SR 76							X*	X*		X*	X*	X*	X*	X*	X*	X*		X*		X*			X*	X*

Regional Growth and Land Use Change / Transportation Network Improvement[2]	Vernal Pool Species[1]					Wetland/ Riparian Species[1]				Uplands Species[1]														
	San Diego Button-Celery	Otay Mesa mint	Spreading navarretia	California Orcutt grass	San Diego mesa mint	Salt marsh bird's-beak	Willowy monardella	Mojave tarplant	San Berardino blue grass	San Diego thorn-mint	San Diego ambrosia	Coastal dunes milk-vetch	Encinitas baccharis	Nevin's barbery	Thread-leaved brodiaea	Orcut's spine flower	Otay tarplant	Short-leaved dudleya	Mexican flannelbush	Orcutt's hazardia	Peirson' s milk-vetch	Gander's ragwort	Small-leaved rose	Dehesa nolina
I-8							X*			X*	X*	X*		X*	X*	X*		X*		X*			X*	
SR 79							X*	X*		X*	X*		X*	X*	X*	X*		X*		X*			X*	X*
SR 94							X*			X*	X*	X*		X*	X*	X*		X*	X*	X*			X*	
I-805/Nobel Drive Transit Operational Improvement							X*			X*	X*	X*	X*	X*	X*	X*		X*	X*	X*			X*	X*
Transit																								
Airport Transit Connection													X*				X*			X*			X*	X*
Blue Line (San Ysidro to UTC)						X*	X*			X*	X*	X*	X*	X*	X*	X*	X*		X*	X*			X*	X*
Green Line (Santee to Downtown)						X*	X*			X*	X*	X*	X*	X*	X*	X*	X*		X*	X*			X*	X*
Orange Line (El Cajon to Downtown)							X*			X*	X*	X*	X*	X*	X*	X*	X*			X*			X*	X*
SPRINTER (Oceanside to Escondido)						X*	X*			X*	X*	X*	X*	X*	X*	X*	X*	X*	X*	X*			X*	X*
Regional Rail 398						X*	X*	X*		X*	X*	X*	X*	X*	X*	X*	X*	X*	X*	X*	X*		X*	X*
Regional Rail 598						X*	X*	X*		X*	X*	X*	X*	X*	X*	X*	X*	X*	X*	X*	X*		X*	X*

[1] The species potential impacts are based on known locations (occurrences) from existing data sources (e.g., CNDDB, SDMMP, USFWS) overlaid on the regional growth and land use and transportation network improvement footprints. This dataset is based on field observations and reported data. However, additional species may occur in areas where no observations have been recorded to date; therefore, rather than quantifying impacts only for areas where data exist potential occurrences are marked with an X. This information would be gathered on a project-specific basis. In addition, species occurrences based on modeling by suitable habitat within 500 feet of regional growth and land use change areas and transportation network improvement footprint are identified with an X*.

Table D-7-2 Impacted Listed Wildlife Species within the San Diego Region Up to the Year 2035

Regional Growth and Land Use Change / Transportation Network Improvement[2]	Aquatic Species[1]				Wetland/ Riparian Species[1]											Uplands Species[1]											
	Tidewater goby	Southern steelhead	San Diego fairy shrimp	Riverside fairy shrimp	Arroyo toad	Western spade-foot	Western pond turtle	Tricolored blackbird	Western snowy plover	California least tern	Light-footed Ridway's rail	South-western willow flycatcher	Western yellow-billed cuckoo	Belding's savannah sparrow	Least Bell's vireo	Crotch's bumblebee	Monarch butterfly (overwinder-ing)	Laguna Mountains skipper	Quino checker-spot butterfly	Hermes copper butterfly	California spotted owl	Western burrowing owl	Coastal California gnatcatcher	Stephens' kangaroo rat	Pacific pocket mouse	Peninsular bighorn sheep	Townsend's big-eared bat
2035 Regional Growth and Land Use Change	X*		X	X	X, X*	X		X, X*	X, X*	X*	X, X*	X*	X*		X, X*	X, X*	X, X*		X, X*	X*	X*	X, X*	X, X*	X, X*			
Active Transportation																											
Bayshore Bikeway Segment 1					X*		X*															X					
Bayshore Bikeway: Barrio Logan Segment (Beardsley Street to Park Boulevard)							X*															X*					
Coastal Rail Trail San Diego - Carmel Valley to Roselle via Sorrento							X*	X*			X, X*				X*	X*			X*								
Coastal Rail Trail San Diego - Del Mar to Sorrento via Carmel Valley					X*		X*	X*			X*				X*	X*			X*	X*			X, X*				
Coastal Rail Trail San Diego - Mission Bay (Clairemont to Tecolote)					X*		X*																				
Coastal Rail Trail: Carlsbad			X		X*		X*	X*							X*	X*			X8			X*		X*			
Coastal Rail Trail: Encinitas to Carlsbad					X*		X*	X*			X*					X*	X*		X*				X, X*				
I-805 Multi-Use Path Bridge Main Street to Palm Avenue															X*	X*	X*		X8	√	X*		X, X*				
Coastal Rail Trail Oceanside					X*										X*				X*								
Inland Rail Trail: Phase 4								X*								X*			X*			X*		X*			
Inland Rail Trail: Vista to Oceanside							X*	X*			X*				X, X*	X*	X*					X*	X, X*	X*			
North Mission Bay Drive to Rose Creek Bike Path					X*		X*								X, X*				X*								
San Diego River Trail - Bridge connection (Sefton Field to Mission Valley YMCA)							X*	X*			X*				X, X*	X											
San Diego River Trail - I-805 to Fenton Parkway							X*	X*							X, X*		X*										
San Diego River Trail - Mast Park to Lakeside Baseball Park					X*		X*	X*			X*		X*		X*	X*	X*		X*			X*	X, X*				
San Diego River Trail: Carlton Oaks Segment							X*	X*			X*		X*		X, X*	X*			X*			X*					
Sweetwater Bikeway Ramp							X*																				
Coastal Rail Trail San Diego - UTC to Rose Canyon													X*		X*	X*	X*		X*	X*		X*	X, X*				
City Heights/Fairmount Corridor																X*			X*	X*			X*				
Coastal Rail Trail Del Mar					X*		X*																				
Harbor Drive (Downtown to Ocean Beach)					X*																						
I-15 Bikeway - Camino del Rio South to Rancho Mission Road: Off-Street															X, X*												
SR 52 Bikeway – SR 532/Mast Drive to San Diego River Trail															X*	X*			X*			X*					
Ocean Beach to Mission Bay					X*		X*																				
Complete Corridors																											
I-15 Managed Lanes					X*		X*						X*		X*	X*			X*	X*		X*	X*				
I-15 @ SDSU Mission Valley															X												
I-5 Managed Lanes					X*			X*					X*		X*	X*	X*					X*	X*				
I-805 Managed Lanes					X*			X*					X*		X*	X*	X*			X*			X*	X*			
SR-15 Managed Lanes					X*								X*			X*											
SR 52 Managed Lanes															X*	X*			X*	X*		X*	X*	X*			

Regional Growth and Land Use Change / Transportation Network Improvement[2]	Aquatic Species[1]				Wetland/ Riparian Species[1]											Uplands Species[1]											
	Tidewater goby	Southern steelhead	San Diego fairy shrimp	Riverside fairy shrimp	Arroyo toad	Western spade-foot	Western pond turtle	Tricolored blackbird	Western snowy plover	California least tern	Light-footed Ridway's rail	South-western willow flycatcher	Western yellow-billed cuckoo	Belding's savannah sparrow	Least Bell's vireo	Crotch's bumblebee	Monarch butterfly (overwinder-ing)	Laguna Mountains skipper	Quino checker-spot butterfly	Hermes copper butterfly	California spotted owl	Western burrowing owl	Coastal California gnatcatcher	Stephens' kangaroo rat	Pacific pocket mouse	Peninsular bighorn sheep	Townsend's big-eared bat
SR 78 Managed Lanes					X*		X*	X*					X*		X*	X*			X*		X*	X*	X*	X*			
SR 11/Otay mesa East POE (Enirco Fermi to Mexico) to OME POE															X*	X*			X*			X*		X*			
I-15/I-805 ML Connector							X*	X*							X*	X*			X*			X*	X*	X*			
I-5/SR 78 Interchange/Arterial Improvements					X*		X*	X*									X*						X*				
I-5/SR 78 ML Connector					X*		X*										X*						X*				
SR 52 Operational Improvements													X*		X, X*	X*			X*	X*		X*	X*	X*			
SR 67													X*		X, X*	X*	X*		X*	X*		X*	X, X*	X*			
SR 76					X*		X*					X*	X*		X, X*	X*			X*	X*	X*	X*	X*	X*			
I-8													X*		X*	X*			X*	X*			X*				
SR 79												X*	X*		X*				X*	X*		X*		X*			
SR 94																X*			X*				X*				
Transit																											
Airport Transit Connection					X*		X*															X					
Blue Line (San Ysidro to UCT)			X		X*		X*	X*			X*		X*		X, X*	X*			X*	X*		X, X*	X, X*	X*			
Green Line (Santee to Downtown)					X*		X*	X*			X*		X*		X, X*	X, X*			X*	X*		X, X*	X*	X*			
Orange Line (El Cajon to Downtown)																X*			X*			X	X, X*				
Regional Rail 398			X		X*		X*	X*	X*	X*	X, X*	X*	X*		X, X*	X*	X8		X*	X*	X*	X, X*	X, X*	X*			
Regional Rail 598			X		X*		X*	X*	X*	X*	X, X*	X*	X*		X, X*	X*	X8		X*	X*	X*	X, X*	X, X*	X*			
SPRINTER Oceanside to Escondido					X*		X*	X*			X*		X*		X, X*	X*	X8		X*			X*	X, X*	X*			

[1] The species potential impacts are based on known locations (occurrences) from existing data sources (e.g., CNDDB, SDMMP, USFWS) overlaid on the regional growth and land use and transportation network improvement footprints. This dataset is based on field observations and reported data. However, additional species may occur in areas where no observations have been recorded to date; therefore, rather than quantifying impacts only for areas where data exist potential occurrences are marked with an X. This information would be gathered on a project-specific basis. In addition, species occurrences based on modeledv by suitable habitat within 500 feet of regional growth and land use change areas and transportation network improvement footprint are identified with an X*.

[2] Transportation network improvements not listed in this table are not anticipated to impact any listed wildlife species.

Table D-7-3 Impacted Listed Plant Species within the San Diego Region, 2036-2050

Regional Growth and Land Use Change / Transportation Network Improvement[2]	Vernal Pool Species[1]					Wetland/ Riparian Species[1]					Uplands Species[1]													
	San Diego Button-Celery	Otay Mesa mint	Spreading navarretia	California Orcutt grass	San Diego mesa mint	Salt marsh bird's-beak	Willowy monardella	Parish's meadowfoam	Mojave tarplant	San Berardino blue grass	San Diego thorn-mint	San Diego ambrosia	Del Mar manzanita	Coastal dunes milk-vetch	Encinitas baccharis	Nevin's barbery	Thread-leaved brodiaea	Orcut's spine flower	Otay tarplant	Short-leaved dudleya	Mexican flannel-bush	Peirson's milk-vetch	Small-leaved rose	Dehesa nolina
2050 Regional Growth and Land Use Change	X*	X*	X*				X*		X*		X*	X, X*		X*	X*	X*	X*	X*	X, X*	X*	X*	X*	X*	X, X*
Active Transportation																								
Bayshore Bikeway: Harbor Drive							X*	X*										X*	X*					X*
Hillcrest - El Cajon Corridor: Fletcher Gap								X*										X*	X*					X*
I-15 Bikeway - Murphy Canyon Road to Affinity Court							X*	X*	X*		X*	X*		X*	X*	X*	X*	X*	X*	X*	X*			X*
I-15 Bikeway - Poway Road interchange to Carmel Mountain Road							X*	X*	X*		X*	X*		X*	X*	X*	X*	X*	X*	X*	X*			X*
I-15 Bikeway - Rancho Bernardo Community Park							X*	X*			X*	X*		X*		X*	X*	X*	X*	X*			X*	
I-805 Connector - Bonita Road to Floyd Avenue							X*	X*			X*	X*		X*		X*	X*	X*	X*	X*			X*	
I-805 Connector - Bonita Road to H Street							X*	X*	X*		X*	X*		X*		X*	X*	X*	X*	X*			X*	
SR 52 Bikeway - I-5 to Santo Road							X*	X*	X*		X*	X*		X*	X*	X*	X*	X*	X*	X*	X*		X*	X*
SR 94 Multi-Use Pathway							X*	X*	X*		X*	X*		X*	X*	X*	X*	X*	X*	X*	X*		X*	X*
Balboa Transit Center Connector Bikeway							X*	X*	X*		X*	X*		X*	X*	X*	X*	X*	X*	X*	X*		X*	X*
Bear Valley Bikeway							X*	X*	X*		X*	X*		X*		X*	X*	X*		X*			X*	
Camp Pendleton Trail							X*	X*	X*		X*	X*		X*		X*	X*	X*	X*	X*			X*	
Carlsbad - San Marcos Corridor								X*										X*	X*				X*	
Central Coast Corridor: Pacific Beach to La Jolla							X*	X*			X*	X*		X*		X*	X*	X*	X*	X*			X*	X*
Chollas Creek Bikeway: North Fork							X*	X*	X*		X*	X*		X*		X*	X*	X*		X*				
Clairemont Mesa to Linda Vista Bikeway							X*	X*	X*		X*	X*		X*		X*	X*	X*		X*			X*	
Coastal Rail Trail - Carlsbad Village (Reach 1)							X*	X*										X*					X*	
Coastal Rail Trail Connections								X*										X*	X*				X*	X*
East County Loop Bikeway: Valle De Oro							X*	X*	X*							X*	X*	X*	X*					
Golden Hill to Fairmount Park							X*	X*			X*	X*		X*		X*	X*	X*		X*				
I-15 Bikeway - Via Rancho Parkway to Citracado Parkway							X*	X*	X*		X*	X*		X*		X*	X*	X*		X*	X*			
Mid-County Bikeway - Coastal Rail Trail to Inland Rail Trail								X*										X*	X*				X*	X*
Midway to Pacific Beach Bikeway							X*	X*										X*	X*				X*	X*
Montezuma Mesa Bikeway							X*	X*	X*		X*	X*		X*	X*	X*	X*	X*	X*	X*	X*			X*
North Coast Bike Trail							X*	X*	X*		X*	X*		X*	X*	X*	X*	X*		X*	X*			X*
North County Inland Bikeway: El Camino Real							X*	X*	X*		X*	X*		X*		X*	X*	X*		X*			X*	
Pacific Highway Coastal Rail Trail Airport Connections (PACTAC)							X*	X*	X*							X*	X*	X*	X*				X*	
San Diego River Bikeway Connections							X*	X*	X*							X*	X*	X*	X*		X*		X*	X*
San Luis Rey River Trail							X*	X*	X*		X*	X*		X*	X*	X*	X*	X*		X*	X*			
San Ysidro to Otay Mesa Connector							X*	X*	X*		X*	X*		X*		X*	X*	X*	X*	X*				
Saturn Boulevard Bikeway																			X*				X*	
SR 125 Connector - Bonita Road to U.S.-Mexico Border	X*	X*	X*	X*	X*	X*	X*		X*		X*				X*	X*	X*		X*	X*	X*		X*	X*

Regional Growth and Land Use Change / Transportation Network Improvement[2]	Vernal Pool Species[1]					Wetland/ Riparian Species[1]					Uplands Species[1]													
	San Diego Button-Celery	Otay Mesa mint	Spreading navarretia	California Orcutt grass	San Diego mesa mint	Salt marsh bird's-beak	Willowy monardella	Parish's meadowfoam	Mojave tarplant	San Berardino blue grass	San Diego thorn-mint	San Diego ambrosia	Del Mar manzanita	Coastal dunes milk-vetch	Encinitas baccharis	Nevin's barbery	Thread-leaved brodiaea	Orcut's spine flower	Otay tarplant	Short-leaved dudleya	Mexican flannel-bush	Peirson's milk-vetch	Small-leaved rose	Dehesa nolina
SR 67 Bikeway - Lakeside to Ramona							X*		X*		X*				X*	X*	X*		X*	X*	X*			
SR 905 Corridor							X*		X*		X*				X*	X*	X*		X*	X*	X*		X*	
Complete Corridors																				X*			X*	
I-15 Managed Lanes							X*	X*	X*		X*	X*		X*	X*	X*	X*	X*	X*		X*			X*
I-5 Managed Lanes							X*	X*	X*		X*	X*		X*				X*	X*		X*			X*
I-805 Managed Lanes							X*	X*	X*		X*	X*		X*	X*	X*	X*	X*	X*	X*	X*			X*
SR 15 Managed Lanes							X*	X*			X*	X*		X*		X*	X*	X*	X*	X*				
SR 52 Managed Lanes							X*	X*	X*		X*	X*		X*	X*			X*	X*		X*		X*	
SR 56 Managed Lanes							X*	X*	X*		X*	X*		X*	X*	X*	X*	X*	X*	X*	X*		X*	
SR 78 Managed Lanes							X*	X*	X*		X*	X*		X*	X*	X*	X*	X*	X*	X*	X*			X*
I-15 @ Clairemont Mesa Boulevard DAR							X*	X*	X*		X*	X*		X*		X*	X*	X*	X*				X*	
I-15 @ SDSU Mission Valley								X*										X*					X*	X*
I-5 @ Voigt DAR								X*								X*	X*	X*		X*				
SR 11/Otay Mesa East POE (Enrico Fermi to Mexico) to OME POE								X*	X*		X*	X*				X*	X*	X*	X*	X*				
I-5/SR 78 Interchange/Arterial Improvements							X*	X*								X*	X*	X*		X*	X*		X*	X*
SR 94/SR 125 Interchange/Arterial Improvements								X*								X*	X*	X*		X*			X*	
I-15/I-805 ML Connector							X*	X*			X*	X*		X*		X*	X*	X*	X*	X*			X*	
I-15/SR 52 ML Connector							X*	X*	X*		X*	X*		X*	X*	X*	X*	X*	X*	X*	X*		X*	
I-15/SR 78 ML Connector								X*								X*	X*	X*		X*			X*	
I-15/SR 94 ML Connector							X*	X*			X*	X*		X*		X*	X*	X*	X*	X*			X*	
I-5/I-805 ML Connector							X*	X*	X*		X*	X*		X*		X*	X*	X*	X*	X*			X*	X*
I-5/SR 78 ML Connector							X*	X*						X*		X*	X*	X*		X*	X*		X*	X*
I-805/SR 163 ML Connector								X*								X*	X*	X*		X*			X*	
SR 52/I-805 ML Connector							X*	X*	X*		X*	X*		X*	X*	X*	X*	X*	X*	X*	X*		X*	X*
SR 94/I-805 ML Connector								X*			X*	X*		X*				X*	X*				X*	
I-8 Operational Improvements							X*		X*		X*	X*			X*				X*		X*		X*	
SR 52 Operational Improvements							X*		X*		X*	X*			X*	X*	X*		X*	X*	X*			
SR 67							X*		X*		X*	X*			X*	X*	X*		X*	X*	X*			
SR 76							X*		X*		X*	X*			X*	X*	X*		X*	X*	X*		X*	
SR 78							X*		X*		X*	X*			X*	X*	X*		X*	X*	X*		X*	X*
SR 79							X*		X*		X*	X*			X*	X*	X*		X*	X*	X*		X*	
SR 94							X*		X*		X*	X*			X*	X*	X*		X*	X*	X*		X*	
I-8							X*		X*		X*	X*			X*	X*	X*		X*	X*	X*		X*	X*
SR 76							X*				X*	X*				X*	X*		X*	X*			X*	

Regional Growth and Land Use Change / Transportation Network Improvement[2]	Vernal Pool Species[1]					Wetland/ Riparian Species[1]					Uplands Species[1]													
	San Diego Button-Celery	Otay Mesa mint	Spreading navarretia	California Orcutt grass	San Diego mesa mint	Salt marsh bird's-beak	Willowy monardella	Parish' s meadowfoam	Mojave tarplant	San Berardino blue grass	San Diego thorn-mint	San Diego ambrosia	Del Mar manzanita	Coastal dunes milk-vetch	Encinitas baccharis	Nevin's barbery	Thread-leaved brodiaea	Orcut's spine flower	Otay tarplant	Short-leaved dudleya	Mexican flannel-bush	Peirson' s milk-vetch	Small-leaved rose	Dehesa nolina
SR 79							X*		X*		X*	X*			X*				X*		X*		X*	
SR 94							X*		X*		X*	X*							X*		X*		X*	X*
I-805/Nobel Drive Transit Operational Improvement							X*		X*		X*	X*			X*	X*	X*		X*	X*	X*		X*	X*
Transit																								
Airport Transit Connection																								X*
Blue Line (San Ysidro to UTC)								X*	X*		X*	X*		X*	X*	X*	X*	X*	X*	X*	X*		X*	X*
Green Line (Santee to Downtown)							X*	X*	X*		X*	X*		X*	X*	X*	X*	X*	X*	X*	X*		X*	X*
Light Rail 582							X*									X*	X*		X*	X*			X*	
Orange Line (El Cajon to Downtown)							X*	X*	X*		X*	X*		X*		X*	X*	X*	X*	X*	X*		X*	
SPRINTER (Oceanside to Escondido)							X*	X*	X*		X*	X*		X*	X*	X*	X*	X*	X*	X* X*	X*		X*	X*
Regional Rail 398							X*	X*	X*		X*	X*		X*	X*	X*	X*	X*	X*	X*	X*	X*	X*	X*
Regional Rail 598							X*	X*	X*		X*	X*		X*	X*	X*	X*	X*	X*	X*	X*	X*	X*	X*

[1] The species potential impacts are based on known locations (occurrences) from existing data sources (e.g., CNDDB, SDMMP, USFWS) overlaid on the regional growth and land use and transportation network improvement footprints. This dataset is based on field observations and reported data. However, additional species may occur in areas where no observations have been recorded to date; therefore, rather than quantifying impacts only for areas where data exist potential occurrences are marked with an X. This information would be gathered on a project-specific basis. In addition, species occurrences based on modeledv by suitable habitat within 500 feet of regional growth and land use change areas and transportation network improvement footprint are identified with an X*.

Table D-7-4 Impacted Listed Wildlife Species within the San Diego Region Up to the Year 2050

Regional Growth and Land Use Change / Transportation Network Improvement[2]	Aquatic Species[1]				Wetland/ Riparian Species[1]											Uplands Species[1]												
	Tidewater goby	Southern steelhead	San Diego fairy shrimp	Riverside fairy shrimp	Arroyo toad	Western spadefoot	Western pond turtle	Tricolored blackbird	Western snowy plover	California least tern	Light-footed Ridway's rail	Southwestern willow flycatcher	Western yellow-billed cuckoo	Belding's savannah sparrow	Least Bell's vireo	Crotch's bumblebee	Monarch butterfly (overwinter-ing)	Laguna Mountains skipper	Quino checkerspot butterfly	California spotted owl	Western burrow-ing owl	Coastal California gnatcatcher	Stephens' kangaroo rat	Pacific pocket mouse	Peninsular bighorn sheep	Townsend's big-eared bat	Hermes copper butterfly	Flat-tailed horned lizard
2050 Regional Growth and Land Use Change			X, X*	X, X*	X*	X, X*		X*	X*	X, X*	X, X*	X*	X*		X, X*	X*	X*		X, X*	X*	X, X*	X, X*	X*				X*	
Active Transportation																												
Bayshore Bikeway: Harbor Drive					X*	X*										X*					X							
I-15 Bikeway Murphy Canyon road to Affinity Court											X*				X*	X*	X*		X*		X*	X*	X*				X*	
I-15 Bikeway - Poway Road interchange to Carmel Mountain Road																X*			X*		X*	X*	X*				X*	
I-15 Bikeway - Rancho Bernardo Community Park																X*			X*			X*						
I-805 Connector - Bonita Road to Floyd Avenue			X*	X*												X*			X*		X*	X*	X*					
I-805 Connector - Bonita Road to H Street			X*	X*											X*	X*			X*		X*	X*	X*					
SR 52 Bikeway - I-5 to Santo Road												X*			X*	X*			X*		X*	X, X*	X*				X*	
SR 94 Multi-Use Pathway												X*			X, X*	X*	X*		X*		X*	X*	X*				X*	
Balboa Transit Center Connector Bikeway																X*			X*			X*					X*	
Bear Valley Bikeway												X*			X*	X*			X*		X*	X*	X*					
Camp Pendleton Trail					X*	X*	X*					X*			X, X*	X*			X*			X						
Carlsbad - San Marcos Corridor												X*									X*							
Central Coast Corridor: Pacific Beach to La Jolla																X*			X*			X*						
Chollas Creek Bikeway: North Fork					X*	X*										X*			X*			X, X*	X*					
Clairemont Mesa to Linda Vista Bikeway															X*	X*			X*			X*						
Coastal Rail Trail - Carlsbad Village (Reach 1)					X*	X*		X*			X*				X*						X*							
Coastal Rail Trail Connections																												
East County Loop Bikeway: Valle De Oro															X*													
Golden Hill to Fairmount Park																X*			X*			X*						
I-15 Bikeway - Via Rancho Parkway to Citracado Parkway							X*	X*			X*				X*	X*	X*		X*		X*	X*	X*					
Mid-County Bikeway - Coastal Rail Trail to Inland Rail Trail																												
Midway to Pacific Beach Bikeway					X*		X*																X*					
Montezuma Mesa Bikeway																X*			X*			X*	X*					
North Coast Bike Trail					X*			X*			X*				X*	X*	X*		X*		X*	X, X*					X*	
North County Inland Bikeway: El Camino Real					X*		X*	X*			X, X*				X*	X*			X*		X*	X*					X*	

Regional Growth and Land Use Change / Transportation Network Improvement[2]	Aquatic Species[1]				Wetland/ Riparian Species[1]											Uplands Species[1]												
	Tidewater goby	Southern steelhead	San Diego fairy shrimp	Riverside fairy shrimp	Arroyo toad	Western spadefoot	Western pond turtle	Tricolored blackbird	Western snowy plover	California least tern	Light-footed Ridway's rail	Southwestern willow flycatcher	Western yellow-billed cuckoo	Belding's savannah sparrow	Least Bell's vireo	Crotch's bumblebee	Monarch butterfly (overwinter-ing)	Laguna Mountains skipper	Quino checkerspot butterfly	California spotted owl	Western burrow-ing owl	Coastal California gnatcatcher	Stephens' kangaroo rat	Pacific pocket mouse	Peninsular bighorn sheep	Townsend's big-eared bat	Hermes copper butterfly	Flat-tailed horned lizard
Pacific Highway Coastal Rail Trail Airport Connections (PACTAC)					X*		X*	X*			X*	X*			X*													
San Diego River Bikeway Connections					X*		X*	X*			X*	X*			X*		X*				X*							
San Luis Rey River Trail					X*		X*					X, X*			X, X*	X*			X*		X*	X, X*	X*				X*	
San Ysidro to Otay Mesa Connector			X			X, X*									X*	X*			X*		X*	X, X*	X*					
Saturn Boulevard Bikeway							X*	X*			X*										X*							
SR 125 Connector - Bonita Road to U.S.-Mexico Border			X	X		X*									X, X*	X*	X*		X, X*	X	X, X*	X, X*	X*				X*	
SR 67 Bikeway - Lakeside to Ramona					X*		X*					X*			X, X*	X*	X*		X*		X*	X, X*	X*				X*	
SR 905 Corridor			X	X		X										X*			X*		X, X*	X*	X*				X*	
Complete Corridors																**X***												
I-15 Managed Lanes					X*		X*	X*			X*	X*			X, X*	X*	X*		X*		X*	X*	X*				*	
I-5 Managed Lanes					X*		X*	X*			X*	X*			X, X*	X*	X*		X*		X*	X*	X*				X*	
I-805 Managed Lanes							X*	X*			X*	X*			X*		X*		X*		X*	X*	X*				X*	
SR 15 Managed Lanes					X*		X*									X*			X*			X*					X*	
SR 52 Managed Lanes					X*							X*			X, X*	X*			X*			X, X*	X*					
SR 56 Managed Lanes															X*	X*			X*		X*	X*	X*					
SR 78 Managed Lanes					X*		X*	X*			X*	X*			X, X*	X*	X*		X*		X*	X, X*	X*					
I-15 @ Clairemont Mesa Boulevard DAR															X*	X*			X*		X*	X*						
I-15 @ SDSU Mission Valley							X*	X*			X*				X													
SR 11/Otay Mesa East POE (Enrico Fermi to Mexico) to OME POE															X*	X*			X*				X*				X*	
I-5/SR 78 Interchange/Arterial Improvements					X*		X*	X*				X*			X*		X*				X*							
I-15/I-805 ML Connector																X*			X*			X*	X*					
I-15/SR 52 ML Connector															X	X*			X*			X*						
I-15/SR 78 ML Connector												X*			X*						X*							
I-15/SR 94 ML Connector					X*											X*			X*			X*	X*				X*	
I-5/I-805 ML Connector							X*					X*			X*	X*			X*		X*	X*						
I-5/SR 78 ML Connector							X*	X*									X*						X*				X*	
SR 52/I-805 ML Connector					X*		X*	X*							X*	X*			X*		X*	X*					X*	
SR 94/I-805 ML Connector								X*								X*			X*			X*					X*	
I-8 Operational Improvements					X*		X*					X*			X*	X*			X*		X*	X*					X*	
SR 52 Operational Improvements												X*			X, X*	X*			X*		X*	X*					X*	
SR 67					X*		X*					X*			X, X*	X*	X*		X*		X*	X, X*					X*	

Regional Growth and Land Use Change / Transportation Network Improvement[2]	Aquatic Species[1]				Wetland/ Riparian Species[1]											Uplands Species[1]												
	Tidewater goby	Southern steelhead	San Diego fairy shrimp	Riverside fairy shrimp	Arroyo toad	Western spadefoot	Western pond turtle	Tricolored blackbird	Western snowy plover	California least tern	Light-footed Ridway's rail	Southwestern willow flycatcher	Western yellow-billed cuckoo	Belding's savannah sparrow	Least Bell's vireo	Crotch's bumblebee	Monarch butterfly (overwinter-ing)	Laguna Mountains skipper	Quino checkerspot butterfly	California spotted owl	Western burrow-ing owl	Coastal California gnatcatcher	Stephens' kangaroo rat	Pacific pocket mouse	Peninsular bighorn sheep	Townsend's big-eared bat	Hermes copper butterfly	Flat-tailed horned lizard
SR 76					X*		X*	X*			X*	X, X*	X		X, X*	X*	X*		X*	X*	X*	X*					X*	
SR 78					X*		X*					X*			X*	X*			X*	X*	X*	X*					X*	
SR 79					X*		X*	X*			X*	X*			X*	X*	X*		X*	X*	X*	X*	X, X*					
SR 94					X*		X*					X*				X*	X*		X*		X*	X*	X*				X*	
I-8																X*			X*			X*						
I-805/Nobel Drive Transit Operational Improvement					X*		X*									X*			X*		X*	X*	X*				X*	
Transit Leap																												
Airport Transit Connection					X*		X*														X, X*							
Blue Line (San Ysidro to UTC)			X		X*		X*	X*			X*	X*			X, X*		X*		X*		X, X*	X, X*	X*				X*	
Green Line (Santee to Downtown)					X*		X*	X*			X*	X*			X, X*	X, X*	X*		X*		X, X*	X*	X*				X*	
Light Rail 582					X*		X*	X*			X*	X*			X, X*	X*	X		X*			X, X*					X*	
Orange Line (El Cajon to Downtown)															X*	X*			X*		X, X*	X, X*	X*					
SPRINTER (Oceanside to Escondido)					X*		X*	X*			X*	X*			X, X*	X*	X, X*		X, X*		X*	X, X*	X*					
Streetcar																X*			X*		X	X*					X*	
Regional Rail 398			X		X*		X*	X*	X*	X*	X, X*	X*			X, X*	X*	X*		X*	X*	X, X*	X, X*	X*				X*	
Regional Rail 598			X		X*		X*	X*	X*	X*	X, X*	X*			X, X*		X*		X*	X*	X, X*	X, X*	X*				X*	

[1] The species potential impacts are based on known locations (occurrences) from existing data sources (e.g., CNDDB, SDMMP, USFWS) overlaid on the regional growth and land use and transportation network improvement footprints. This dataset is based on field observations and reported data. However, additional species may occur in areas where no observations have been recorded to date; therefore, rather than quantifying impacts only for areas where data exist potential occurrences are marked with an X. This information would be gathered on a project-specific basis. In addition, species occurrences based on modeledv by suitable habitat within 500 feet of regional growth and land use change areas and transportation network improvement footprint are identified with an X*.

[2] Transportation network improvements not listed here are not anticipated to impact any listed wildlife species.