Appendix 4
Endangered and
Threatened Species

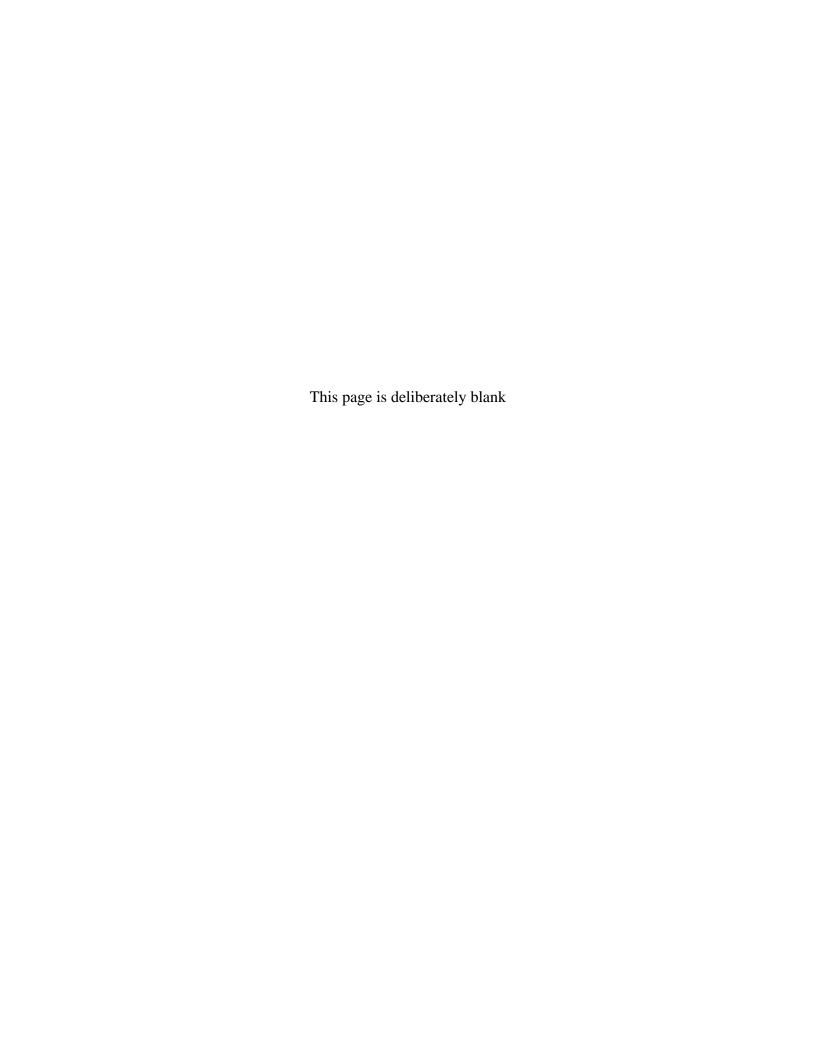


Table 4-1 MSCP Covered Species

Common Name	Scientific Name	Status	Habitat
Plants			
San Diego thornmint	Acanthomintha ilicifolia	FT, SE	Chaparral, coastal scrub, grassland, vernal pools.
Shaw's agave	Agave shawii	CNPS List 2	Coastal scrub.
San Diego ambrosia	Ambrosia pumila	FE, CNPS List 1B	Coastal scrub.
Aphanisma	Aphanisma blitoides	CNPS List 1B	Coastal dunes and coastal scrub.
Del Mar manzanita	Arctostaphylos glandulosa var. crassifolia	FE, CNPS List 1B	Chaparral, coniferous forest.
Otay manzanita	Arctostaphylos otavensis	CNPS 1B	Chaparral and cismontane woodland.
Coastal dunes milk vetch	Astragalus tener var. titi	FE, SE, CNPS List 1B	Coastal scrub and coastal dunes.
Encinitas baccharis	Baccharis vanessae	FT, SE, CNPS List 1B	Chaparral.
Nevin's barberry	Berberis nevinii	FE, SE, CNPS List 1B	Chaparral, cismontane woodland, coastal scrub, riparian scrub.
Thread-leaved brodiaea	Brodiaea filifolia	FT, SE, CNPS List 1B	Cismontane woodland, coastal scrub, grassland, vernal pools.
Orcutt's brodiaea	Brodiaea orccuttii	CNPS List 1B	Vernal pools, grassland, coniferous forest, cismontane woodland, chaparral.
Dense reed grass	Calamagrostis koelerioide	CNPS List 4	Meadows, slopes, dry hills, and ridges.
Dunn's mariposa lily	Calocjortus dunnii	SR, CNPS List 1B	Coniferous forest and chaparral.
Slender-pod jewel flower	Caulanthus stenocarpus	SR	Chaparral.
Lakeside ceanothus	Ceanothus cyaneus	CNPS List 1B	Coniferous forest and chaparral.
Wart-stemmed ceonothus	Ceonothus verrucosus	CNPS List 2	Chaparral.
Salt marsh bird's-beak	Cordylanthus maritimus ssp. maritimus	FE, SE, CNPS List 1B	Coastal salt marsh and coastal dunes.
Orcutt's bird's-beak	Cordylanthus orcuttianus	CNPS List 2	Coastal scrub.
Del Mar sand aster	Corethyrogyre filaginiogolia var. linifolia	CNPS List 1B	Chaparral and coastal scrub.
Tecate cypress	Cupressus forbesii	CNPS List 1B	Coniferous forest and chaparral.
Short-leaved live-forever	Dudleya blochmaniae ssp. brevifolia	SE, CNPS List 1B	Chaparral and coastal scrub.
Variegated dudleya	Dudleya variegata	CNPS List 1B	Chaparral, coastal scrub, cismontane woodland, grassland, and vernal pools.
Sticky dudleya	Dudleya viscida	CNPS List 1B	Coastal scrub and chaparral.
Palmer's ericameria	Ericameria palmeri ssp. palmeri	CNPS List 2, County Group B	Coastal drainages in mesic chaparral.
Coast wallflower	rysimum ammophilum	FE, SE, CNPS List 1B	Vernal pools, coastal scrub, and grassland.
San Diego button-celery	Eryngium aristulatum ssp. parishii	CNPS List 1B	Chaparral (maritime), coastal dunes, and coastal scrub.
San Diego barrel cactus	Ferocactus viridescens	CNPS List 2	Chaparral, coastal scrub, grassland.

Table 4-1 MSCP Covered Species

Common Name	Scientific Name	Status	Habitat
Otay tarplant	Hemizonia viridescens	FT, SE, CNPS List 1B	Coastal scrub and grassland.
Heart-leaved pitcher sage	Lepechinia cardiophylla	CNPS List 1B	Coniferous forest, chaparral, and cismontane woodland.
Gander's pitcher sage	Lepechinia ganderi	CNPS List 1B	Coniferous forest, coastal scrub, and grassland.
Nuttall's lotus	Lotus nuttallianus	CNPS List 1B	Coastal dunes and coastal scrub.
Felt-leaved monardella	Lotus hypoleuca ssp. lanata	CNPS List 1B	Chaparral and cismontane woodland.
Willowy monardella	Monardella linoides ssp. viminea	FE, SE, CNPS List 1B	Coastal scrub (alluvial ephemeral washes with adjacent coastal scrub, chaparral, and sycamore woodland.
San Diego goldenstar	Muilla clevelandii	CNPS List 1B	Chaparral, coastal scrub, grassland, and vernal pools.
Postrate navarretia	Navarretia fossalis	CNPS List 1B	Coastal scrub, grassland, and vernal pools.
Dehesa bear-grass	Nolina interra	SE, CNPS List 1B	Dry slopes in chaparral.
Snake cholla	Opuntia parryi var. Serpentina	CNPS List 1B	Chaparral and coastal scrub.
California Orcutt grass	Orcuttia californica	FE, SE, CNPS List 1B	Vernal pools.
San Diego mesa mint	Poqoqyne abramsii	CNPS List 1B	Coniferous forest and chaparral.
Otay mesa mint	Poqoqyne nudiuscula	FE, SE, CNPS List 1B	Vernal pools.
Torrey pine (native populations)	Pinus torreyana ssp. torreyana	FE, SE, CNPS List 1B	Vernal pools.
Small-leaved rose	Rosa minutifolia	SE, CNPS List 2	Coastal scrub and chaparral.
Gander's butterweed	Senecio ganderi	CNPS List 1B	Chaparral, cismontane woodland, coastal scrub, riparian woodland, and grassland.
Narrow-leaved nightshade	Solanum tenuilobatum	N/A	Open chamise chaparral and sage scrub.
Parry's tetracoccus	Tetrocaccus dioicus	County Group A	Found in chaparral and coastal scrub. Prefers stony, decomposed gabbro soil
Wildlife			
Saltmarsh skipper	Panoquina errans	N/A	Coastal salt marshes.
Thorne's hairstreak	Mitoura thornei	N/A	Associated with Tecate Cypress (Otay Mt.).
Riverside fairy shrimp*	Streptocephalus woottonii	FE	Vernal pools.
San Diego fairy shrimp*	Branchinecta sandiegonensis	FE	Vernal pools.
Arroyo southwestern toad	Bufo microscanphus ssp. californicus	FE	Semi-arid regions near washes or intermittent streams.
California red-legged frog	Rana aurora ssp. Draytoni	FT	Lowlands & foothills in or near permanent sources of deep water with dense, shrubby or emergent riparian vegetation.
Southwestern pond turtle	Clemmys marmorata ssp. Pallida	CSC	Permanent or nearly permanent bodies of water in many habitat types (below 6,000 ft. elevation).

Table 4-1 MSCP Covered Species

Common Name	Scientific Name	Status	Habitat
Orange-throated whiptail	Cnemidophorus hyperythrus ssp. beldingi	CSC	Coastal scrub and chaparral.
San Diego horned lizard	Phyrnosoma coronatum ssp. balinvillei	CSC	Coastal sage scrub and chaparral in arid and semi-arid climate conditions.
Cooper's hawk	Accipiter cooperii	CSC	Woodland (nesting).
Tricolored blackbird	Agelaius tricolor	CSC	Riparian (marshes)
Golden eagle	Aguila chrysaetos	CSC	(Nesting & wintering) Rolling foothills mountain areas and desert.
Southern California rufous-crowned sparrow	Aimophila ruficeps ssp. canescens	CSC	Coastal sage scrub and chaparral.
Canada goose	Branta canadensis ssp. Moffitti	N/A	Nests at edges of ponds, lakes, or swamps on rocks or grass out in the water.
Swainson's hawk	Buteo swainsoni	ST	(Nesting) riparian and oaks.
Ferruginous hawk	Buteo regalis	CSC	(Wintering) Grassland, desert scrub.
Coastal cactus wren	Campylorhynchus brunneicapillus ssp. Couesi	CSC	Coastal sage scrub.
Western snowy plover	Charadrius alexandrinus ssp. nivosus	FT, CSC	(Nesting) Coastal beaches.
Mountain plover	Charadrius montanus	CSC	(Wintering) Grassland and agricultural fields.
Northern harrier	Circus cyanus	CSC	(Nesting) coastal salt & freshwater marsh and grasslands.
Reddish egret	Egretta rufescens	N/A	Marshes and swamps
Southwestern willow flycatcher	Empidonax traillii ssp. extimus	FE, SE	(Nesting) Riparian woodlands.
American peregrine falcon	Falco peregrinus anatum	SE (federally delisted)	(Nesting) Near wetlands, lakes, rivers, or other water; on cliffs, banks, dunes, mounds; also human-made structures.
Bald eagle	Haliaeetus leucocephalus	FT, SE	(Nesting & wintering) Ocean shore, lake margins, & rivers. Most nests within 1 mi of water.
Long-billed curlew	Numenius americanus	N/A	(Nesting) Breeds in upland grasslands and wet meadows.
Belding's savannah sparrow	Passerculus sandwichensis ssp. beldingi	SE	Coastal salt marshes.
Large-billed savannah sparrow	Passerculus sandwichensis	CSC	(Wintering) Breeds along the Colorado River delta in Mexico and winters at the Salton Sea.
Californica brown pelican	Palcanus occidentalis ssp. californicus	FE, SE	(Nesting colony) Colonial nester on coastal islands just outside the surf line.
White-faced ibis	Plegadis chihi	CSC	(Rookery site) Shallow fresh-water marsh.
California gnatcatcher	Polioptila californica ssp. californica	FT, CSC	Coastal sage scrub.
Light-footed clapper rail	Rallus longirostris ssp. levipes	FE, SE	Salt marshes traversed by tidal sloughs, where cordgrass and pickleweed are the dominant vegetation.

Table 4-1 MSCP Covered Species

Common Name	Scientific Name	Status	Habitat
Western bluebird	Sialia mexicana	N/A	Edges of oak woodlands, typically where they adjoin meadows or grasslands (Unitt 1984).
Burrowing owl	Speotyro (Athene) cunicularia ssp. hypugaea	CSC	(Burrow sites) Open, dry annual or perennial grasslands and agricultural fields.
Elegant tern	Sterna elegans	CSC	(Nesting colony) Only knwon breeding colony in U.S. located in the salt work dikes at the south end of San Diego Bay.
California least tern	Sterna antillarum ssp. browni	FE, SE	(Nesting colony) Nests along the coast from San Francisco Bay south to northern Baja California.
Least Bell's vireo	Vireo bellii ssp. pusillus	SE, FE	(Nesting) Summer resident of southern California in low riparian in the vicinity of water or in dry river bottoms.
American badger	Taxidea taxus	CSC	Drier open stages of most shrub, forest, and herbaceous habitats with friable soils.
Southern mule deer	Odocoileus hemionus fuliginata	N/A	Various habitats from forests to deserts.
Mountain lion	Felis concolor	CFP	Brushy or forested regions.

FT – Federally Threatened; FE – Federally Endangered; ST – State Threatened; SE – State Endangered; SR - State Rare; CSC – California Species of Concern; CFP – California Fully Protected Species; CNPS List 1B – California Native Plant Society List 1B (Plants rare, threatened or endangered in California and elsewhere); CNPS List 2 – California Native Plant Society List 2 (Plants rare, threatened or endangered in California, but more common elsewhere); CNPS List 4 – California Native Plant Society List 4 (Plants of limited distribution; a watch list); County Group B – Plants rare, threatened or endangered in California, but more common elsewhere; County Group A – Plants rare, threatened or endangered in California and elsewhere.

Table 4 - 2 Sensitive Species (not covered by the MSCP)

Common Name	Scientific Name	Status	Habitat
Plants			
Delicate clarkia	Clarkia delicata	CNPS List 1B	Oak woodlands.
Summer holly	Comarostaphylis diversifolia ssp. diersifolia	CNPS List 1B	Coastal and foothill canyons in chaparral.
Otay tarplant	Deinandra conjugens	CNPS List 1B	Upper montane coniferous forest.
Short-leaved dudleya	Dudleya multicaulis	CNPS List 1B	Chaparral and coastal scrub.
San Diego sunflower	Hulsea californica	CNPS List 1B	Chaparral slopes in montane areas.
Spreading navarretia	Navarretia fossalis	CNPS List 1B	Vernal pools.
Chaparral nolina	Nolina cismontana	CNPS List 1B	Chaparral and coastal scrub.
Nuttall's scrub oak	Quercus dumosa	CNPS List 1B	Maritime chaparral.
Moreno currant	Ribes canthariforme	CNPS List 1B	Moist areas in southern interior chaparral.
Gander's ragwort	Senecio ganderi	CNPS List 1B	Gabbro soils in interior regions.
Invertebrates			
Laguna Mountain skipper	Pyrgus ruralis lagunae	FE	Open mountain meadows.
Quino checkerspot butterfly*	Euphydryas editha quino	FE	Open sunny areas in sage scrub and chaparral.
Fish			
Desert pupfish (introduced in ABDSP)	Cyprinodon macularius	FE, SE	Desert ponds, springs, marshes and streams.
Tidewater goby	Eucyclogobius newberryi	FE	Brackish water habitats along the coast.
Unarmored three-spine stickleback (introduced)	Casterosteus aculeatus williamsoni	FE, SE	Weedy pools, backwaters, and among emergent vegetation along stream edges.
Southern steel head trout	Oncorhynchus mykiss	FE, CSC	Rivers and creeks (federal listing refers to populations from Santa Maria River south to San Mateo Creek).
Amphibians and Reptiles			
Desert slender salamander	Batrachoseps major aridus	FE, SE	Desert washes and desert scrub (known only from Hidden Palm Canyon and Guadalupe Creek).
Mountain yellow legged frog	Rana muscosa	FE	Federal listing refers to populations in the San Gabriel, San Jacinto and San Bernardino Mountains only (always found near water).
Southwestern pond turtle	Clemmys marmorata pallida	CSC	Permanent or nearly permanent bodies of water in a variety of habitat types.
Coastal western whiptail	Aspidoscelis tigris stejnegeri	FSC	Deserts and semiarid areas with sparse vegetation and open areas (also found in woodland and riparian areas).
Northern red diamond rattlesnake	Crotalus rubber ruber	CSC/FSC	Chaparral, woodland, grassland, and desert areas.

Table 4 - 2 Sensitive Species (not covered by the MSCP)

Common Name	Scientific Name	Status	Habitat
Barefoot banded gecko	Coleonyx switaki	FT	Areas of massive rock and rock outcrops at the heads of canyons.
Coastal rosy boa	Charina trivirgata	FSC	Desert and chaparral areas with dense vegetation and rocky cover.
Mammals			
Pacific pocket mouse	Perognathus longimembris pacificus	FE, CSC	Narrow coastal plains from the Mexican border to Los Angeles.
San Diego black-tailed jackrabbit	Lepus californicus bennettii	CSC/FSC	Intermediate canopy stages of shrub habitats.
Stephens' kangaroo rat	Dipodomys stephensi	FE, ST	Grasslands and sparse scrub habitats.
Peninsular bighorn sheep	Ovis Canadensis nelsoni	FE, ST	Open desert slopes below 4,000 feet.
Birds			
California condor (extirpated)	Gymnogyps californianus	FE, SE	Open grasslands and foothill chaparral in mountain ranges.
California black rail (extirpated)	Laterallus jamaicensis coturniculus	ST	Salt marshes bordering larger bays.
Marbled murrelet (only found offshore)	Brachyramphus marmoratus	FT, SE	Feeds near shore and nests inland along the coast.
Coastal cactus wren	Campylorhynchus brunneicapillus sandiegensis	CSC	Sage scrub.
Grasshopper sparrow	Ammodramus savannarum	N/A	Dense grasslands on rolling hills and hillsides on lower mountain slopes.
Burrowing owl	Athene cunicularia	CSC	Open, dry grasslands and agricultural fields.
Golden eagle	Aquila chrysaetos	CSC	Rolling foothills of mountain areas, sage-juniper flats, and deserts.
California spotted owl	Strix occidentalis occidentalis	CSC	Mixed conifer forest.
Bank swallow (formerly bred)	Riparia riparia	ST	Riparian and other lowland habitats west of the desert.
Yellow-breasted chat	Icteria virens	CSC	Riparian thickets near watercourses.
	 	1 1/2/25 1 1	

^{*} The County of San Diego is currently in the process of amending the MSCP to include the Quino checkerspot butterfly.

 $FSC-Federal \ Species \ of \ Concern; FT-Federally \ Threatened; FE-Federally \ Endangered; ST-State \ Threatened; SE-State \ Endangered; CSC-California \ Species \ of \ Concern; CNPS \ List \ 1B-California \ Native \ Plant \ Society \ List \ 1B \ (Plants \ rare, threatened \ or \ endangered \ in \ California \ and \ elsewhere).$