

# Appendix J

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## **CNDDDB SPECIES LISTS**

**Table J-1. List of Animal Species Considered in this SEIR**

| Common name                                      | Federal listing status | Calif listing status | Other Status   | General Habitat   | Micro Habitat   |
|--|------------------------|----------------------|--|---|---|
| Santa Cruz long-toed salamander                  | Endangered             | Endangered           | DFG-Fully Protected  | Wet meadows near sea level in a few restricted locales in Santa Cruz and Monterey counties.                         | Aquatic larvae prefer shallow (<12 inches) water, using clumps of vegetation or debris for cover. Adults use mammal burrows.    |
| California condor                                | Endangered             | Endangered           | ABC-Watch List of Birds of Conservation Concern; CDF-Sensitive; IUCN-Critically Endangered | Require vast expanses of open savannah, grasslands, and foothill chaparral in mountain ranges of moderate altitude. | Deep canyons containing clefts in the rocky walls provide nesting sites. forages up to 100 miles from roost/nest.               |
| light-footed clapper rail                        | Endangered             | Endangered           | ABC-Watch List of Birds of Conservation Concern; DFG-Fully Protected                       | 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.         |
| California clapper rail                          | Endangered             | Endangered           | ABC-Watch List of Birds of Conservation Concern; DFG-Fully Protected                       | Salt-water & brackish marshes traversed by tidal sloughs in the vicinity of San Francisco Bay.                      | Associated with abundant growths of pickleweed, but feeds away from cover on invertebrates from mud-bottomed sloughs.           |
| California least tern                            | Endangered             | Endangered           | ABC-Watch List of Birds of Conservation Concern; DFG-Fully Protected                       | Nests along the coast from San Francisco Bay south to northern Baja California.                                     | Colonial breeder on bare or sparsely vegetated, flat substrates: sand beaches, alkali flats, land fills, or paved areas.        |
| southwestern willow flycatcher                   | Endangered             | Endangered           | ABC-Watch List of Birds of Conservation Concern  | Riparian woodlands in Southern California.  |   |
| least Bell's vireo                               | Endangered             | Endangered           | ABC-Watch List of Birds of Conservation Concern; IUCN-Near Threatened                      | Summer resident of Southern California in low riparian in vicinity of water or in dry river bottoms; below 2000 ft. | Nests placed along margins of bushes or on twigs projecting into pathways, usually willow, Baccharis, mesquite.                 |
| coho salmon - central California coast ESU       | Endangered             | Endangered           | AFS-Endangered   | Federal listing = pops between Punta Gorda & San Lorenzo River. State listing = pops south of Punta Gorda.          | Require beds of loose, silt-free, coarse gravel for spawning. Also need cover, cool water & sufficient dissolved oxygen.        |
| chinook salmon - Sacramento River winter-run ESU | Endangered             | Endangered           | AFS-Endangered   | Sacramento River below Keswick Dam. Spawns in the Sacramento River but not in tributary streams.                    | Requires clean, cold water over gravel beds with water temperatures between 6 & 14 C for spawning.                              |
| Mohave tui chub                                  | Endangered             | Endangered           | AFS-Endangered; DFG-Fully Protected  | Endemic to the Mojave River basin, adapted to alkaline, mineralized waters.   | Needs deep pools, ponds, or slough-like areas. Needs vegetation for spawning.   |
| Owens tui chub                                   | Endangered             | Endangered           | AFS-Endangered   | Endemic to the Owens River basin in a variety of habitats.  | Needs clear, clean water, adequate cover, and aquatic vegetation.   |
| bonytail   | Endangered             | Endangered           | AFS-Endangered; IUCN-Endangered  | Found in the Colorado River bordering California.   | Adapted for swimming in swift water, but both adults & young need backwaters & eddies. Needs gravel riffles for spawning        |
| Modoc sucker                                     | Endangered             | Endangered           | AFS-Endangered; DFG-Fully Protected; IUCN-Endangered                                       | Found in tributary streams of the upper Pit River.  | Found in large, shallow, muddy-bottomed pools. They are even found in intermittent streams. Spawn in riffle areas.              |
| shortnose sucker                                 | Endangered             | Endangered           | AFS-Endangered; DFG-Fully Protected; IUCN-Endangered                                       | Native to the Klamath and Lost River systems in California & Oregon.  | Spend most of year in open waters of large lakes. They feed on plankton. Spawn in tributary streams.                            |
| razorback sucker                                 | Endangered             | Endangered           | AFS-Endangered; DFG-Fully Protected; IUCN-Endangered                                       | Found in the Colorado River bordering California.   | Adapted for swimming in swift currents but also need quiet waters. Spawn in areas of sand/gravel/rocks in shallow water.        |
| Lost River sucker                                | Endangered             | Endangered           | AFS-Endangered; DFG-Fully Protected; IUCN-Endangered                                       | Native to the Lost River system in California & Oregon.   | Primarily a lake species found in fairly deep water. Adults run up tributary streams to spawn in the spring.                    |
| desert pupfish                                   | Endangered             | Endangered           | AFS-Endangered   | Desert ponds, springs, marshes and streams in Southern California.  | Can live in salinities from fresh water to 68 ppt, can withstand temps from 9 - 45 C & dissolved oxygen levels down to 0.1 ppm. |
| Owens pupfish                                    | Endangered             | Endangered           | AFS-Endangered; DFG-Fully Protected; IUCN-Endangered                                       | Shallow water habitats in the Owens Valley.   | Prefers warm, clear, shallow water free of exotic fishes. Needs areas of firm substrate for spawning.                           |
| unarmored threespine stickleback                 | Endangered             | Endangered           | AFS-Endangered; DFG-Fully Protected  | Weedy pools, backwaters, and among emergent vegetation at the stream edge in small Southern California streams.     | Cool (<24 C), clear water with abundant vegetation.   |
| riparian brush rabbit                            | Endangered             | Endangered           |  | Riparian areas on the San Joaquin River in northern Stanislaus County.  | Dense thickets of wild rose, willows, and blackberries.   |

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| Common name                                  | Federal listing status | Calif listing status | Other Status   | General Habitat  | Micro Habitat  |
|--|------------------------|----------------------|--|--|--|
| Morro Bay kangaroo rat                       | Endangered             | Endangered           | DFG-Fully Protected  | Coastal sage scrub on the south side of Morro Bay.   | Needs sandy soil, but not active dunes, prefers early seral stages.  |
| giant kangaroo rat                           | Endangered             | Endangered           | IUCN-Endangered  | Annual grasslands on the western side of the San Joaquin Valley, marginal habitat in alkali scrub.                       | Need level terrain & sandy loam soils for burrowing.   |
| Fresno kangaroo rat                          | Endangered             | Endangered           | IUCN-Vulnerable  | Alkali sink-open grassland habitats in western Fresno County.  | Bare alkaline clay-based soils subject to seasonal inundation, with more friable soil mounds around shrubs & grasses.    |
| Tipton kangaroo rat                          | Endangered             | Endangered           | IUCN-Vulnerable  | Saltbrush scrub and sink scrub communities in the Tulare Lake Basin of the southern San Joaquin Valley.                  | Needs soft friable soils which escape seasonal flooding. Digs burrows in elevated soil mounds at bases of shrubs.        |
| salt-marsh harvest mouse                     | Endangered             | Endangered           | DFG-Fully Protected; IUCN-Endangered                                 | Only in the saline emergent wetlands of San Francisco Bay and its tributaries.   | Pickleweed is primary habitat. Do not burrow, build loosely organized nests. Require higher areas for flood escape.      |
| Amargosa vole                                | Endangered             | Endangered           |  | Known only from bulrush marshes along the Amargosa River.  | Burrows in soft soil. Nests are constructed in the burrows. Creates runway system through grasses from burrow.           |
| Sierra Nevada bighorn sheep                  | Endangered             | Endangered           | DFG-Fully Protected  | Historically found along the east side and crest of the Sierra Nevada, and on the Great Western Divide.                  | Available water and steep, open terrain free of competition from other grazing ungulates.                                |
| blunt-nosed leopard lizard                   | Endangered             | Endangered           | DFG-Fully Protected; IUCN-Endangered                                 | Resident of sparsely vegetated alkali and desert scrub habitats, in areas of low topographic relief.                     | Seeks cover in mammal burrows, under shrubs or structures such as fence posts; they do not excavate their own burrows.   |
| San Francisco garter snake                   | Endangered             | Endangered           | DFG-Fully Protected  | Vicinity of freshwater marshes, ponds and slow moving streams in San Mateo County & extreme northern Santa Cruz County.  | Prefers dense cover & water depths of at least one foot. upland areas near water are also very important.                |
| California freshwater shrimp                 | Endangered             | Endangered           | IUCN-Endangered  | Endemic to Marin, Napa, & Sonoma cos. Found in low elev, low gradient streams where riparian cover is moderate to heavy. | Shallow pools away from main streamflow. winter: undercut banks w/exposed roots. Summer: leafy branches touching water.  |
| Shasta crayfish                              | Endangered             | Endangered           | IUCN-Critically Endangered   | Found only in the Fall and Hat Creek sub-drainages of the Pit River system.  | Inhabits cool, clear water w/low gradient and temp variability; substrate is volcanic rubble on sand/gravel; little veg. |
| Yuma clapper rail                            | Endangered             | Threatened           | ABC-Watch List of Birds of Conservation Concern; DFG-Fully Protected | Nests in fresh-water marshes along the Colorado River and along the south and east ends of the Salton Sea.               | Prefers stands of cattails and tules dissected by narrow channels of flowing water; principle food is crayfish.          |
| Stephens' kangaroo rat                       | Endangered             | Threatened           | IUCN-Endangered  | Primarily annual & perennial grasslands, but also occurs in coastal scrub & sagebrush with sparse canopy cover.          | Prefers buckwheat, chamise, brome grass & filaree. Will burrow into firm soil.   |
| San Joaquin kit fox                          | Endangered             | Threatened           |  | Annual grasslands or grassy open stages with scattered shrubby vegetation.   | Need loose-textured sandy soils for burrowing, and suitable prey base.   |
| peninsular bighorn sheep                     | Endangered             | Threatened           | DFG-Fully Protected  | Open desert slopes below 4,000 ft elevation from San Gorgonio Pass south into Mexico.                                    | Optimal habitat includes steep walled canyons and ridges bisected by rocky or sandy washes, with available water.        |
| Sierra Madre yellow-legged frog              | Endangered             | Candidate            | DFG-Species of Special Concern; IUCN-Endangered; USFS-Sensitive      | Federal listing refers to populations in the San Gabriel, San Jacinto & San Bernardino Mountains only.                   | Always encountered within a few feet of water. Tadpoles may require 2 - 4 yrs to complete their aquatic development.     |
| arroyo toad                                  | Endangered             | None                 | DFG-Species of Special Concern; IUCN-Endangered                      | Semi-arid regions near washes or intermittent streams, including valley-foothill and desert riparian, desert wash, etc.  | Rivers with sandy banks, willows, cottonwoods, and sycamores; loose, gravelly areas of streams in drier parts of range.  |
| southern steelhead - southern California ESU | Endangered             | None                 | AFS-Endangered; DFG-Species of Special Concern                       | Fed listing refers to pops from Santa Maria River south to southern extent of range (San Mateo Creek in San Diego Co.)   | Southern steelhead likely have greater physiological tolerances to warmer water & more variable conditions.              |
| tidewater goby                               | Endangered             | None                 | AFS-Endangered; DFG-Species of Special Concern; IUCN-Vulnerable      | Brackish water habitats along the Calif coast from Agua Hedionda Lagoon, San Diego Co. to the mouth of the Smith River.  | Found in shallow lagoons and lower stream reaches, they need fairly still but not stagnant water & high oxygen levels.   |
| Buena Vista Lake shrew                       | Endangered             | None                 | DFG-Species of Special Concern                                       | Marshlands and riparian areas in the Tulare Basin.   | Prefers moist soil. Uses stumps, logs and litter for cover.  |

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| Common name                            | Federal listing status | Calif listing status | Other Status                                       | General Habitat  | Micro Habitat   |
|--|------------------------|----------------------|--|--|---|
| lesser long-nosed bat                  | Endangered             | None                 | IUCN-Vulnerable                                    |  |   |
| Point Arena mountain beaver            | Endangered             | None                 | DFG-Species of Special Concern; IUCN-Least Concern | Coastal areas of Point Arena with springs or seepages.   | North-facing slopes of ridges & gullies with friable soils & thickets of undergrowth.   |
| Pacific pocket mouse                   | Endangered             | None                 | DFG-Species of Special Concern                     | Inhabits the narrow coastal plains from the Mexican border north to El Segundo, Los Angeles Co.                                    | Seems to prefer soils of fine alluvial sands near the ocean, but much remains to be learned.  |
| San Bernardino kangaroo rat            | Endangered             | None                 | DFG-Species of Special Concern                     | Alluvial scrub vegetation on sandy loam substrates characteristic of alluvial fans and flood plains.                               | Needs early to intermediate seral stages.   |
| riparian (=San Joaquin Valley) woodrat | Endangered             | None                 | DFG-Species of Special Concern                     | Riparian areas along the San Joaquin, Stanislaus & Tuolumne rivers.  | Need areas with mix of brush & trees. Need suitable nesting sites in trees, snags or logs.  |
| Conservancy fairy shrimp               | Endangered             | None                 | IUCN-Endangered                                    | Endemic to the grasslands of the northern two-thirds of the Central Valley; found in large, turbid pools.                          | Inhabit astatic pools located in swales formed by old, braided alluvium; filled by winter/spring rains, last until June.                      |
| longhorn fairy shrimp                  | Endangered             | None                 | IUCN-Endangered                                    | Endemic to the eastern margin of the Central Coast mtns in seasonally astatic grassland vernal pools.                              | Inhabit small, clear-water depressions in sandstone and clear-to-turbid clay/grass-bottomed pools in shallow swales.                          |
| San Diego fairy shrimp                 | Endangered             | None                 | IUCN-Endangered                                    | Endemic to San Diego and Orange County mesas.  | Vernal pools.   |
| Riverside fairy shrimp                 | Endangered             | None                 | IUCN-Endangered                                    | Endemic to W RIV, ORA & SDG counties in areas of tectonic swales/earth slump basins in grassland & coastal sage scrub.             | Inhabit seasonally astatic pools filled by winter/spring rains. Hatch in warm water later in the season.                                      |
| vernal pool tadpole shrimp             | Endangered             | None                 | IUCN-Endangered                                    | Inhabits vernal pools and swales in the Sacramento Valley containing clear to highly turbid water.                                 | Pools commonly found in grass bottomed swales of unplowed grasslands. Some pools are mud-bottomed & highly turbid.                            |
| Ohlone tiger beetle                    | Endangered             | None                 |  | Remnant native grasslands with California oatgrass & purple needlegrass in Santa Cruz County.                                      | Substrate is poorly-drained clay or sandy clay soil over bedrock of Santa Cruz mudstone.  |
| Mount Hermon (=barbate) June beetle    | Endangered             | None                 |  | Known only from sand hills in vicinity of Mt. Hermon, Santa Cruz County.   |   |
| Delhi Sands flower-loving fly          | Endangered             | None                 |  | Found only in areas of the Delhi Sands formation in southwestern San Bernardino & northwestern Riverside counties.                 | Requires fine, sandy soils, often with wholly or partly consolidated dunes & sparse vegetation. Oviposition req. shade.                       |
| Laguna Mountains skipper               | Endangered             | None                 | XERCES-Critically Imperiled                        | Only in a few open meadows in yellow pine forest between 5,000 & 6,000 ft. in the vicinity of Mt Laguna & Palomar Mtn.             | Eggs laid on leaves of <i>Horkelia bolanderi clevelandi</i> . Larvae feed on leaves and overwinter on the host plant.                         |
| Carson wandering skipper               | Endangered             | None                 | XERCES-Critically Imperiled                        | Found in grasslands on alkaline substrates in eastern California (around Honey Lake) & western Nevada (Washoe Co.) below 5,000 ft. | The larval host plant is salt grass. Needs open areas near springs or water.  |
| San Bruno elfin butterfly              | Endangered             | None                 | XERCES-Critically Imperiled                        | Coastal, mountainous areas with grassy ground cover, mainly in the vicinity of San Bruno Mountain, San Mateo County.               | Colonies are located on steep, north-facing slopes within the fog belt. Larval host plant is <i>Sedum spathulifolium</i> .                    |
| El Segundo blue butterfly              | Endangered             | None                 | XERCES-Critically Imperiled                        | Restricted to remnant coastal dune habitat in Southern California.   | Hostplant is <i>Eriogonum parvifolium</i> ; larvae feed only on the flowers and seeds; used by adults as major nectar source.                 |
| Smith's blue butterfly                 | Endangered             | None                 | XERCES-Critically Imperiled                        | Most commonly associated with coastal dunes & coastal sage scrub plant communities in Monterey & Santa Cruz counties.              | Hostplant: <i>Eriogonum latifolium</i> and <i>Eriogonum parvifolium</i> are utilized as both larval and adult foodplants.                     |
| Palos Verdes blue butterfly            | Endangered             | None                 | XERCES-Critically Imperiled                        | Restricted to the cool, fog-shrouded, seaward side of Palos Verdes Hills, Los Angeles County.                                      | Host plant is <i>Astragalus trichopodus</i> var. <i>lonchus</i> (locoweed).   |
| Mission blue butterfly                 | Endangered             | None                 | XERCES-Critically Imperiled                        | Inhabits grasslands of the San Francisco peninsula.  | Three larval host plants: <i>Lupinus albifrons</i> , <i>L. variicolor</i> , and <i>L. formosus</i> , of which <i>L. albifrons</i> is favored. |

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| Common name   | Federal listing status | Calif listing status | Other Status   | General Habitat  | Micro Habitat   |
|---|------------------------|----------------------|--|--|---|
| Lange's metalmark butterfly                         | Endangered             | None                 | XERCES-Critically Imperiled  | Inhabits stabilized dunes along the San Joaquin River. Endemic to Antioch Dunes, Contra Costa County.                    | Primary host plant is Eriogonum nudum var auriculatum; feeds on nectar of other wildflowers, as well as host plant.   |
| Behren's silverspot butterfly                       | Endangered             | None                 | XERCES-Critically Imperiled  | Restricted to the Pacific side of the Coast Ranges, from Point Arena to Cape Mendocino, Mendocino Co.                    | Inhabits coastal terrace prairie habitat. Foodplant is Viola sp.  |
| Myrtle's silverspot                                 | Endangered             | None                 | XERCES-Critically Imperiled  | Restricted to the foggy, coastal dunes/hills of the Point Reyes peninsula; extirpated from coastal San Mateo County.     | Larval foodplant thought to be Viola adunca.  |
| callippe silverspot butterfly                       | Endangered             | None                 | XERCES-Critically Imperiled  | Restricted to the northern coastal scrub of the San Francisco peninsula.   | Hostplant is Viola pedunculata. Most adults found on E-facing slopes; males congregate on hilltops in search of females.  |
| quino checkerspot butterfly                         | Endangered             | None                 | XERCES-Critically Imperiled  | Sunny openings within chaparral & coastal sage shrublands in parts of Riverside & San Diego counties.                    | Hills & mesas near the coast. need high densities of food plants Plantago erecta, P. insularis, Orthocarpus purpurescens  |
| Zayante band-winged grasshopper                     | Endangered             | None                 | IUCN-Endangered  | Isolated sandstone deposits in the Santa Cruz Mountains (the Zayante Sand Hills ecosystem)                               | Mostly on sand parkland habitat but also in areas with well-developed ground cover & in sparse chaparral with grass.  |
| Morro shoulderband (=banded dune) snail             | Endangered             | None                 | IUCN-Critically Endangered   | Restricted to the coastal strand in the immediate vicinity of Morro Bay.   | Inhabits the duff beneath Haplopappus, Salvia, Dudleya, and Mesembryanthemum.   |
| Casey's June beetle                                 | Proposed Endangered    | None                 |  | Found only in two populations in a small area of southern Palm Springs.  | Found in sandy soils; the females live underground and only come to the ground surface to mate.   |
| marbled murrelet                                    | Threatened             | Endangered           | ABC-Watch List of Birds of Conservation Concern; CDF-Sensitive; IUCN-Endangered  | Feeds near-shore; nests inland along coast from Eureka to Oregon border & from Half Moon Bay to Santa Cruz.              | Nests in old-growth redwood-dominated forests, up to six miles inland, often in Douglas-fir.  |
| Delta smelt   | Threatened             | Endangered           | AFS-Threatened; IUCN-Endangered  | Sacramento-San Joaquin Delta. Seasonally in Suisun Bay, Carquinez Strait & San Pablo Bay.                                | Seldom found at salinities > 10 ppt. Most often at salinities < 2ppt.   |
| Coachella Valley fringe-toed lizard                 | Threatened             | Endangered           | IUCN-Endangered  | Limited to sandy areas in the Coachella Valley, Riverside County.  | Requires fine, loose, windblown sand (for burrowing), interspersed with hardpan and widely spaced desert shrubs.  |
| California tiger salamander                         | Threatened             | Threatened           | DFG-Species of Special Concern; IUCN-Vulnerable                                  | Central Valley DPS federally listed as threatened. Santa Barbara & Sonoma counties DPS federally listed as endangered.   | Need underground refuges, especially ground squirrel burrows & vernal pools or other seasonal water sources for breeding  |
| coho salmon - southern Oregon / northern California | Threatened             | Threatened           | AFS-Threatened; DFG-Species of Special Concern                                   | Fed listing refers to populations between Cape Blanco, Oregon & Punta Gorda, Humboldt County, California.                | State listing refers to populations between the Oregon border & Punta Gorda, California.  |
| chinook salmon - Central Valley spring-run ESU      | Threatened             | Threatened           | AFS-Threatened   | Adult nos. depend on pool depth & volume, amount of cover, & proximity to gravel. Water temps >27 C is lethal to adults  | Federal listing refers to pops spawning in Sacramento River & tributaries.  |
| desert tortoise                                     | Threatened             | Threatened           | IUCN-Vulnerable  | Most common in desert scrub, desert wash, and Joshua tree habitats; occurs in almost every desert habitat.               | Require friable soil for burrow and nest construction. Creosote bush habitat with lg annual wildflower blooms preferred.  |
| Alameda whipsnake                                   | Threatened             | Threatened           |  | Typically found in chaparral and scrub habitats but will also use adjacent grassland, oak savanna and woodland habitats. | Mostly south-facing slopes & ravines, with rock outcrops, deep crevices or abundant rodent burrows, where shrubs form a vegetative mosaic with oak trees and grasses. |
| giant garter snake                                  | Threatened             | Threatened           | IUCN-Vulnerable  | Prefers freshwater marsh and low gradient streams. Has adapted to drainage canals & irrigation ditches.                  | This is the most aquatic of the garter snakes in California.  |
| California red-legged frog                          | Threatened             | None                 | DFG-Species of Special Concern; IUCN-Vulnerable                                  | Lowlands & foothills in or near permanent sources of deep water with dense, shrubby or emergent riparian vegetation.     | Requires 11-20 weeks of permanent water for larval development. must have access to estivation habitat.   |
| western snowy plover                                | Threatened             | None                 | ABC-Watch List of Birds of Conservation Concern; DFG-Species of Special Concern; | Sandy beaches, salt pond levees & shores of large alkali lakes.  | Needs sandy, gravelly or friable soils for nesting.   |
| coastal California gnatcatcher                      | Threatened             | None                 | ABC-Watch List of Birds of Conservation Concern; DFG-Species of Special Concern  | Obligate, permanent resident of coastal sage scrub below 2500 ft in Southern California.                                 | Low, coastal sage scrub in arid washes, on mesas & slopes. Not all areas classified as coastal sage scrub are occupied.   |

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|--|------------------------|----------------------|---|--|--|
| green sturgeon                                 | Threatened             | None                 | AFS-Vulnerable; DFG-Species of Special Concern; IUCN-Near Threatened; NMFS-Species of | These are the most marine species of sturgeon. Abundance increases northward of Point Conception. Spawns in the Sacramento, Klamath, & Trinity Rivers. | Spawns at temps between 8-14 C. Preferred spawning substrate is large cobble, but can range from clean sand to bedrock.  |
| chinook salmon - California coastal ESU        | Threatened             | None                 | AFS-Threatened  | Federal listing refers to wild spawned, coastal, spring & fall runs between Redwood Cr, Humboldt Co & Russian River, Sonoma Co                         |  |
| Lahontan cutthroat trout                       | Threatened             | None                 | AFS-Threatened  | Historically in all accessible cold waters of the Lahontan Basin in a wide variety of water temps & conditions.  | Cannot tolerate presence of other salmonids. Requires gravel riffles in streams for spawning.                            |
| Paiute cutthroat trout                         | Threatened             | None                 | AFS-Endangered  | Cool, well-oxygenated waters   | Cannot tolerate presence of other salmonids, requires clean gravel for spawning.   |
| Little Kern golden trout                       | Threatened             | None                 | AFS-Endangered  | Native to the Little Kern River in Tulare County. Found in clear, cold mountain streams & lakes at 5,000 to 9,000 ft.                                  | Need well-oxygenated, gravel-bottomed shallows for spawning.   |
| steelhead - central California coast ESU       | Threatened             | None                 | AFS-Threatened  | From Russian River, south to Soquel Cr & to, but not including, Pajaro River. Also San Francisco & San Pablo Bay basins.                               |  |
| steelhead - south/central California coast ESU | Threatened             | None                 | AFS-Threatened; DFG-Species of Special Concern  | Fed listing refers to runs in coastal basins from the Pajaro River south to, but not including, the Santa Maria River.                                 |  |
| steelhead - Central Valley ESU                 | Threatened             | None                 | AFS-Threatened  | Populations in the Sacramento and San Joaquin rivers and their tributaries.  |  |
| steelhead - northern California ESU            | Threatened             | None                 | AFS-Threatened; DFG-Species of Special Concern  | Coastal basins from Redwood Creek south to the Gualala River, inclusive. Does not include summer-run steelhead.  |  |
| eulachon                                       | Threatened             | None                 | DFG-Species of Special Concern  | Found in Klamath River, Mad River, Redwood Creek & in small numbers in Smith River & Humboldt Bay tributaries.   | Spawn in lower reaches of coastal rivers w/ moderate water velocities & bottom of pea-sized gravel, sand & woody debris  |
| Santa Ana sucker                               | Threatened             | None                 | AFS-Threatened; DFG-Species of Special Concern; IUCN-Vulnerable                       | Endemic to Los Angeles Basin south coastal streams.  | Habitat generalists, but prefer sand-rubble-boulder bottoms, cool, clear water, & algae.                                 |
| vernal pool fairy shrimp                       | Threatened             | None                 | IUCN-Vulnerable   | Endemic to the grasslands of the Central Valley, Central Coast mtns, and South Coast mtns, in astatic rain-filled pools.                               | Inhabit small, clear-water sandstone-depression pools and grassed swale, earth slump, or basalt-flow depression pools.   |
| Delta green ground beetle                      | Threatened             | None                 | IUCN-Critically Endangered  | Restricted to the margins of vernal pools in the grassland area between Jepson Prairie and Travis AFB.   | Prefers the sandy mud substrate where it slopes gently into the water, with low-growing vegetation, 25-100% cover.       |
| valley elderberry longhorn beetle              | Threatened             | None                 |   | Occurs only in the central valley of California, in association with blue elderberry ( <i>Sambucus mexicana</i> ).                                     | Prefers to lay eggs in elderberries 2-8 inches in diameter; some preference shown for "stressed" elderberries.           |
| Hippolyta fritillary                           | Threatened             | None                 | XERCES-Critically Imperiled   | Coastal meadows in Del Norte County.   | The larvae feed only on the foliage of the western dog violet ( <i>Viola adunca</i> ).                                   |
| Bay checkerspot butterfly                      | Threatened             | None                 | XERCES-Critically Imperiled   | Restricted to native grasslands on outcrops of serpentine soil in the vicinity of San Francisco Bay.   | Plantago erecta is the primary host plant; Orthocarpus densiflorus & O. purpurescens are the secondary host plants.      |
| Kern primrose sphinx moth                      | Threatened             | None                 | XERCES-Critically Imperiled   | Found in the Walker Basin, Kern Co., and several other scattered locations (Carrizo Plain, Pinnacles NM).  | Host plant is Camissonia contorta epilobioides (evening primrose).   |
| mountain plover                                | Proposed Threatened    | None                 | ABC-Watch List of Birds of Conservation Concern; BLM-Sensitive; DFG-Species of        | Short grasslands, freshly plowed fields, newly sprouting grain fields, & sometimes sod farms   | Short vegetation, bare ground & flat topography. Prefers grazed areas & areas with burrowing rodents.                    |
| western yellow-billed cuckoo                   | Candidate              | Endangered           | USFS-Sensitive; USFWS-Birds of Conservation Concern                                   | Riparian forest nester, along the broad, lower flood-bottoms of larger river systems.  | Nests in riparian jungles of willow, often mixed with cottonwoods, w/ lower story of blackberry, nettles, or wild grape. |
| Yosemite toad                                  | Candidate              | None                 | DFG-Species of Special Concern; IUCN-Endangered; USFS-Sensitive                       | Vicinity of wet meadows in central High Sierra, 6400 to 11,300 feet in elevation.  | Primarily montane wet meadows; also in seasonal ponds associated with lodgepole pine and subalpine conifer forest.       |

**Table J-1. List of Animal Species Considered in this SEIR**

| Common name                               | Federal listing status | Calif listing status | Other Status   | General Habitat   | Micro Habitat   |
|---|------------------------|----------------------|--|---|---|
| Oregon spotted frog                       | Candidate              | None                 | DFG-Species of Special Concern; IUCN-Vulnerable; USFS-Sensitive                        | Low swampy areas in mountainous woodlands & wet meadows, springs, small cold streams & lakes in northeastern Calif.           | Standing water needed for breeding.   |
| Sierra Nevada yellow-legged frog          | Candidate              | Candidate            | DFG-Species of Special Concern; IUCN-Endangered; USFS-Sensitive                        | Always encountered within a few feet of water. Tadpoles may require 2 - 4 yrs to complete their aquatic development.          |   |
| Palm Springs round-tailed ground squirrel | Candidate              | None                 | DFG-Species of Special Concern   | Restricted to the Coachella Valley. Prefers desert succulent scrub, desert wash, desert scrub, alkali scrub, & levees.        | Prefers open, flat, grassy areas in fine-textured, sandy soil. Density correlated with winter rainfall.                               |
| Pacific fisher                            | Candidate              | None                 | BLM-Sensitive; DFG-Species of Special Concern; USFS-Sensitive                          | Intermediate to large-tree stages of coniferous forests & deciduous-riparian areas with high percent canopy closure.          | Uses cavities, snags, logs & rocky areas for cover & denning. Needs large areas of mature, dense forest.                              |
| mardon skipper                            | Candidate              | None                 | XERCES-Imperiled   | Known from western Washington State and extreme northwestern Del Norte Co.  |   |
| California brown pelican                  | Delisted               | Delisted             | DFG-Fully Protected  | Colonial nester on coastal islands just outside the surf line.  | Nests on coastal islands of small to moderate size which afford immunity from attack by ground-dwelling predators. Roosts communally. |
| American peregrine falcon                 | Delisted               | Delisted             | CDF-Sensitive; DFG-Fully Protected; USFWS-Birds of Conservation Concern                | Near wetlands, lakes, rivers, or other water; on cliffs, banks, dunes, mounds; also, human-made structures.                   | Nest consists of a scrape or a depression or ledge in an open site.   |
| bald eagle                                | Delisted               | Endangered           | CDF-Sensitive; DFG-Fully Protected; IUCN-Least Concern; USFS-Sensitive; USFWS-Birds of | Ocean shore, lake margins, & rivers for both nesting & wintering. Most nests within 1 mi of water.                            | Nests in large, old-growth, or dominant live tree w/open branches, especially ponderosa pine. Roosts communally in winter.            |
| cackling (=Aleutian Canada) goose         | Delisted               | None                 |  | Winters on lakes and inland prairies.   | Forages on natural pasture or that cultivated to grain; loafs on lakes, reservoirs, ponds.  |
| elf owl                                   | None                   | Endangered           | ABC-Watch List of Birds of Conservation Concern; IUCN-Least Concern; USFWS-Birds of    | In California, nesting area limited to cottonwood-willow & mesquite riparian zone along the Colorado River.                   | Nest in deserted woodpecker holes, often in larger trees which offer insulation from high daytime temperatures.                       |
| great gray owl                            | None                   | Endangered           | CDF-Sensitive; IUCN-Least Concern; USFS-Sensitive                                      | Resident of mixed conifer or red fir forest habitat, in or on edge of meadows.  | Requires large diameter snags in a forest with high canopy closure, which provide a cool sub-canopy microclimate.                     |
| Gila woodpecker                           | None                   | Endangered           | IUCN-Least Concern; USFWS-Birds of Conservation Concern                                | In California, inhabits cottonwoods and other desert riparian trees, shade trees, and date palms.                             | Cavity nester in riparian trees or saguaro cactus.  |
| gilded flicker                            | None                   | Endangered           | ABC-Watch List of Birds of Conservation Concern; IUCN-Least Concern; USFWS-Birds of    | Sonoran desert habitat and riparian woodlands along the Colorado River.   | Uses willows, cottonwood, tree yucca and, when available, saguaro cactus.   |
| willow flycatcher                         | None                   | Endangered           | ABC-Watch List of Birds of Conservation Concern; IUCN-Least Concern; USFS-Sensitive;   | Inhabits extensive thickets of low, dense willows on edge of wet meadows, ponds, or backwaters; 2000-8000 ft elevation        | Requires dense willow thickets for nesting/roosting. Low, exposed branches are used for singing posts/hunting perches.                |
| little willow flycatcher                  | None                   | Endangered           | ABC-Watch List of Birds of Conservation Concern; USFWS-Birds of Conservation Concern   | Mountain meadows and riparian habitats in the Sierra Nevada and Cascades  | Nests near the edges of vegetation clumps and near streams.   |
| Arizona bell's vireo                      | None                   | Endangered           | ABC-Watch List of Birds of Conservation Concern; IUCN-Near Threatened; USFWS-Birds     | Summer resident along Colorado River. Chiefly inhabits willow thickets with undergrowth of Baccharis glutinosa                | Nests in willow, mesquite, or other small tree/shrub, within 8 ft (usually 2-3 ft) of ground.   |
| Belding's savannah sparrow                | None                   | Endangered           |  | Inhabits coastal salt marshes, from Santa Barbara south through San Diego County.   | Nests in Salicornia on and about margins of tidal flats.  |
| Kern Canyon slender salamander            | None                   | Threatened           | IUCN-Vulnerable; USFS-Sensitive  | Only in the lower Kern River Canyon in valley-foothill hardwood, valley-foothill hardwood-conifer, & mixed chaparral.         | Found under downed pine, oak & chaparral scrub logs, as well as under rocks & talus on steep, north-facing slopes.                    |
| Tehachapi slender salamander              | None                   | Threatened           | BLM-Sensitive; IUCN-Vulnerable; USFS-Sensitive   | Valley-foothill hardwood-conifer & valley-foothill riparian in the Piute & Tehachapi Mountains of Kern County.                | Prefers wet talus slopes or log-strewn hillsides with a steep, north-facing exposure.   |
| limestone salamander                      | None                   | Threatened           | DFG-Fully Protected; IUCN-Vulnerable; USFS-Sensitive                                   | Limestone outcrops in digger pine-chaparral belt along the Merced River and its tributaries, from 800-2600 feet in elevation. | California buckeye ia an indicator of optimal habitat. Seeks cover in limestone caverns, talus, rock fissures, surface objects.       |

**Table J-1. List of Animal Species Considered in this SEIR**

| Common name                       | Federal listing status | Calif listing status | Other Status   | General Habitat   | Micro Habitat  |
|-----------------------------------|------------------------|----------------------|--|---|--|
| Shasta salamander                 | None                   | Threatened           | BLM-Sensitive; IUCN-Vulnerable; USFS-Sensitive                                       | Cool, wet ravines and valleys; dominant vegetation is oak woodland or chaparral, also pine and fir; 100 to 2550 ft elevation.                               | Seeks cover under surface objects such as logs, rocks, and limestone slabs or talus, near limestone fissures or caves.             |
| Siskiyou Mountains salamander     | None                   | Threatened           | IUCN-Endangered; USFS-Sensitive  | Mixed conifer habitat of dense, pole-to-mature size, trees. Active above ground only during spring & fall rains.  | Found under loose rock rubble at the base of talus slopes or under surface objects.  |
| Scott Bar salamander              | None                   | Threatened           | IUCN-Vulnerable  | Found only in the vicinity of the Scott River in Siskiyou County  |  |
| black toad                        | None                   | Threatened           | DFG-Fully Protected; IUCN-Vulnerable   | Found only in Deep Springs Valley, between the White and Inyo mountains, Inyo County, 5000-5200 feet in elevation.  | Near springs, watercourses, marshes, & wet meadows. Seeks cover under & between clumps of vegetation or surface objects.           |
| Swainson's hawk                   | None                   | Threatened           | ABC-Watch List of Birds of Conservation Concern; IUCN-Least Concern; USFS-Sensitive; | Breeds in grasslands with with scattered trees, juniper-sage flats, riparian areas, savannahs, & agricultural or ranch lands with groves or lines of trees. | Requires adjacent suitable foraging areas such as grasslands, or alfalfa or grain fields supporting rodent populations.            |
| California black rail             | None                   | Threatened           | ABC-Watch List of Birds of Conservation Concern; DFG-Fully Protected; IUCN-Near      | Inhabits freshwater marshes, wet meadows & shallow margins of saltwater marshes bordering larger bays.  | Needs water depths of about 1 inch that does not fluctuate during the year & dense vegetation for nesting habitat.                 |
| greater sandhill crane            | None                   | Threatened           | DFG-Fully Protected; USFS-Sensitive  | Nests in wetland habitats in northeastern California; winters in the Central Valley.  | Prefers grain fields within 4 mi of a shallow body of water used as a communal roost site; irrigated pasture used as loafing sites |
| bank swallow                      | None                   | Threatened           | IUCN-Least Concern   | 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, ocean to dig nesting hole.              |
| rough sculpin                     | None                   | Threatened           | AFS-Vulnerable; DFG-Fully Protected; IUCN-Vulnerable                                 | Restricted to the Pit River above and below the falls at Burney, & the Hat Creek & Fall River subdrainages.   | Found mostly on the muddy bottoms of large streams.  |
| longfin smelt                     | None                   | Threatened           | DFG-Species of Special Concern   | Euryhaline, nektonic & anadromous. Found in open waters of estuaries, mostly in middle or bottom of water column.   | Prefer salinities of 15-30 ppt, but can be found in completely freshwater to almost pure seawater.                                 |
| Cottonball Marsh pupfish          | None                   | Threatened           | AFS-Threatened   | Two joined marshy areas in the northwest portion of Death Valley National Park.   | Shallow pools with salinities from 14 to 160 ppt.  |
| Nelson's antelope squirrel        | None                   | Threatened           | IUCN-Endangered  | Western San Joaquin Valley from 200-1200 ft elev. On dry, sparsely vegetated loam soils.  | Dig burrows or use k-rat burrows. Need widely scattered shrubs, forbs & grasses in broken terrain with gullies & washes            |
| Mohave ground squirrel            | None                   | Threatened           | IUCN-Vulnerable  | Open desert scrub, alkali scrub & Joshua tree woodland. Also feeds in annual grasslands. Restricted to Mojave Desert.                                       | Prefers sandy to gravelly soils, avoids rocky areas. Uses burrows at base of shrubs for cover. Nests are in burrows.               |
| Sierra Nevada red fox             | None                   | Threatened           | USFS-Sensitive   | Found from the Cascades down to the Sierra Nevada. Found in a variety of habitats from wet meadows to forested areas.                                       | Use dense vegetation & rocky areas for cover & den sites. Prefer forests interspersed w/ meadows or alpine fell-fields.            |
| California wolverine              | None                   | Threatened           | DFG-Fully Protected; IUCN-Near Threatened; USFS-Sensitive                            | Found in the north coast mountains and the Sierra Nevada. Found in a wide variety of high elevation habitats.   | Needs water source. uses caves, logs, burrows for cover & den area. Hunts in more open areas. Can travel long distances            |
| southern rubber boa               | None                   | Threatened           | USFS-Sensitive   | Restricted to the San Bernardino and San Jacinto mtns; found in a variety of montane forest habitats.   | Found in vicinity of streams or wet meadows; requires loose, moist soil for burrowing; seeks cover in rotting logs.                |
| Trinity bristle snail             | None                   | Threatened           | IUCN-Vulnerable  | Known only from along a few streams in the Trinity River drainage.  | Juveniles are found under bark of standing dead broadleaf trees, and the species may require this habitat.                         |
| Inyo Mountains slender salamander | None                   | None                 | BLM-Sensitive; DFG-Species of Special Concern; IUCN-Endangered; USFS-Sensitive       | Moist canyons on the west & east slopes of the Inyo Mountains, where surface water is present.  | Takes cover under rocks on moist sandy loam in steep-walled canyons with permanent springs. Also in underground crevices.          |
| relict slender salamander         | None                   | None                 | DFG-Species of Special Concern; IUCN-Data Deficient; USFS-Sensitive                  | Mixed coniferous forest on the western slope of southern Sierra Nevada between Kings River drainage & Kern River Canyon.                                    | Usually found under boards, rotting logs, rocks & surface litter. Surface activity limited to rainy winter months.                 |
| San Gabriel slender salamander    | None                   | None                 | IUCN-Data Deficient; USFS-Sensitive  | Known only from the San Gabriel Mtns. Found under rocks, wood, fern fronds & on soil at the base of talus slopes.   | Most active on the surface in winter and early spring.   |

**Table J-1. List of Animal Species Considered in this SEIR**

| Common name                      | Federal listing status | Calif listing status | Other Status  | General Habitat  | Micro Habitat  |
|----------------------------------|------------------------|----------------------|---|--|--|
| Kings River slender salamander   | None                   | None                 | IUCN-Vulnerable   | Mixed chaparral with buckeye, laurel, canyon and blue oak, ponderosa and lowland pine.                                   | Found under rocks in areas of talus.   |
| Kern Plateau salamander          | None                   | None                 | IUCN-Near Threatened; USFS-Sensitive  | Only in the semiarid Kern Plateau & Scodie Mountains. Frequents Jeffery pine/red fir, lodgepole pine & riparian scrub.   | Found under rocks, bark fragments, logs and within and under wet logs, especially in spring and seep areas.              |
| yellow-blotched salamander       | None                   | None                 | BLM-Sensitive; DFG-Species of Special Concern; USFS-Sensitive                       | Forests and well-shaded canyons, as well as oak woodlands and old chaparral.   | Needs surface objects, such as logs, boards, and rocks. Also needs old rodent burrows or other underground retreats.     |
| large-blotched salamander        | None                   | None                 | DFG-Species of Special Concern; USFS-Sensitive                                      | Found in conifer and woodland associations.  | Found in leaf litter, decaying logs and shrubs in heavily forested areas.  |
| Mount Lyell salamander           | None                   | None                 | DFG-Species of Special Concern; IUCN-Least Concern                                  | Massive rock areas in mixed conifer, red fir, lodgepole pine, and subalpine habitats, 4000 to 11,600 feet in elevation.  | Active on the surface only when free water is available, in the form of seeps, drips, or spray.                          |
| Owens Valley web-toed salamander | None                   | None                 | DFG-Species of Special Concern  | Oak Creek in Charlie Canyon, Inyo County.  | Rocky habitat, including cliff faces and cave walls.   |
| Del Norte salamander             | None                   | None                 | DFG-Species of Special Concern; IUCN-Near Threatened                                | Old-growth associated species with optimum conditions in the mixed conifer/hardwood ancient forest ecosystem.            | Cool, moist, stable microclimate, a deep litter layer, closed multi-storied canopy, dominated by large, old trees.       |
| Coast Range newt                 | None                   | None                 | DFG-Species of Special Concern  | Coastal drainages from Mendocino County to San Diego County.   | Lives in terrestrial habitats & will migrate over 1 km to breed in ponds, reservoirs & slow moving streams.              |
| southern torrent salamander      | None                   | None                 | DFG-Species of Special Concern; IUCN-Least Concern; USFS-Sensitive                  | Coastal redwood, Douglas-fir, mixed conifer, montane riparian, and montane hardwood-conifer habitats. Old growth forest. | Cold, well-shaded, permanent streams and seepages, or within splash zone or on moss-covered rock within trickling water. |
| Pacific tailed frog              | None                   | None                 | DFG-Species of Special Concern; IUCN-Least Concern                                  | Occurs in montane hardwood-conifer, redwood, Douglas-fir & ponderosa pine habitats.                                      | Restricted to perennial montane streams. Tadpoles require water below 15 degrees C.                                      |
| Couch's spadefoot                | None                   | None                 | BLM-Sensitive; DFG-Species of Special Concern; IUCN-Least Concern                   | Temporary desert rainpools that last a least 7 days, with water temps > 15 C & with subterranean refuge sites close by.  | An insect food base especially termites must be available.   |
| western spadefoot                | None                   | None                 | BLM-Sensitive; DFG-Species of Special Concern; IUCN-Near Threatened                 | Occurs primarily in grassland habitats, but can be found in valley-foot-hill hardwood woodlands.                         | Vernal pools are essential for breeding and egg-laying.  |
| northern red-legged frog         | None                   | None                 | DFG-Species of Special Concern; USFS-Sensitive                                      | Humid forests, woodlands, grasslands, & stream-sides in northwestern California, usually near dense riparian cover.      | Generally near permanent water, but can be found far from water, in damp woods and meadows, during non-breeding season.  |
| foothill yellow-legged frog      | None                   | None                 | BLM-Sensitive; DFG-Species of Special Concern; IUCN-Near Threatened; USFS-Sensitive | Partly-shaded, shallow streams & riffles with a rocky substrate in a variety of habitats.                                | Need at least some cobble-sized substrate for egg-laying. Need at least 15 weeks to attain metamorphosis.                |
| Cascades frog                    | None                   | None                 | DFG-Species of Special Concern; IUCN-Near Threatened; USFS-Sensitive                | Montane aquatic habitats such as mountain lakes, small streams, and ponds in meadows; open coniferous forests.           | Standing water required for reproduction. Hibernates in mud on the bottom of lakes and ponds during the winter.          |
| northern leopard frog            | None                   | None                 | DFG-Species of Special Concern; IUCN-Least Concern; USFS-Sensitive                  | Native range is east of Sierra Nevada-Cascade Crest. Near permanent or semi-permanent water in a variety of habitats.    | Highly aquatic species. Shoreline cover, submerged and emergent aquatic vegetation are important habitat characteristics |
| fork-tailed storm-petrel         | None                   | None                 | DFG-Species of Special Concern; IUCN-Least Concern                                  | Colonial nester on small, offshore islets. Forages over the open ocean, usually well off-shore.                          | Birds choose off-shore islets which provide nesting crannies beneath rocks or sod for burrowing.                         |
| ashy storm-petrel                | None                   | None                 | ABC-Watch List of Birds of Conservation Concern; DFG-Species of Special Concern;    | Colonial nester on off-shore islands. Usually nests on driest part of islands. Forages over open ocean.                  | Nest sites on islands are in crevices beneath loosely piled rocks or driftwood, or in caves.                             |
| American white pelican           | None                   | None                 | DFG-Species of Special Concern; IUCN-Least Concern                                  | Colonial nester on large interior lakes.   | Nests on large lakes, providing safe roosting and breeding places in the form of well-sequestered islets.                |
| double-crested cormorant         | None                   | None                 | DFG-Watch List; IUCN-Least Concern  | Colonial nester on coastal cliffs, offshore islands, & along lake margins in the interior of the state.                  | Nests along coast on sequestered islets, usually on ground with sloping surface, or in tall trees along lake margins.    |

**Table J-1. List of Animal Species Considered in this SEIR**

| Common name               | Federal listing status | Calif listing status | Other Status   | General Habitat   | Micro Habitat   |
|---------------------------|------------------------|----------------------|--|---|---|
| least bittern             | None                   | None                 | DFG-Species of Special Concern; IUCN-Least Concern; USFWS-Birds of Conservation        | Colonial nester in marshlands and borders of ponds and reservoirs which provide ample cover.                        | Nests usually placed low in tules, over water.  |
| great blue heron          | None                   | None                 | CDF-Sensitive; IUCN-Least Concern  | Colonial nester in tall trees, cliffsides, and sequestered spots on marshes.  | Rookery sites in close proximity to foraging areas: marshes, lake margins, tide-flats, rivers and streams, wet meadows. |
| great egret               | None                   | None                 | CDF-Sensitive; IUCN-Least Concern  | Colonial nester in large trees.   | Rookery sites located near marshes, tide-flats, irrigated pastures, and margins of rivers and lakes.                    |
| snowy egret               | None                   | None                 | IUCN-Least Concern   | Colonial nester, with nest sites situated in protected beds of dense tules.   | Rookery sites situated close to foraging areas: marshes, tidal-flats, streams, wet meadows, and borders of lakes.       |
| black-crowned night heron | None                   | None                 | IUCN-Least Concern   | Colonial nester, usually in trees, occasionally in tule patches.  | Rookery sites located adjacent to foraging areas: lake margins, mud-bordered bays, marshy spots.                        |
| white-faced ibis          | None                   | None                 | DFG-Watch List; IUCN-Least Concern   | Shallow fresh-water marsh.  | Dense tule thickets for nesting interspersed with areas of shallow water for foraging.                                  |
| wood stork                | None                   | None                 | DFG-Species of Special Concern; IUCN-Least Concern                                     | Freshwater and saltwater sloughs, lagoons, shallow ponds and marshes.   |   |
| fulvous whistling-duck    | None                   | None                 | DFG-Species of Special Concern; IUCN-Least Concern                                     | Fresh-water marsh.  | Tule/cattail marsh.   |
| harlequin duck            | None                   | None                 | DFG-Species of Special Concern; IUCN-Least Concern                                     | Breeds on west slope of the Sierra Nevada, nesting along shores of swift, shallow rivers.                           | Nest often built in a recess, sheltered overhead by stream bank, rocks, woody debris, usually within 7 ft of water.     |
| osprey                    | None                   | None                 | CDF-Sensitive; DFG-Watch List; IUCN-Least Concern                                      | Ocean shore, bays, fresh-water lakes, and larger streams.   | Large nests built in tree-tops within 15 miles of a good fish-producing body of water.                                  |
| white-tailed kite         | None                   | None                 | DFG-Fully Protected; IUCN-Least Concern  | Rolling foothills and valley margins with scattered oaks & river bottomlands or marshes next to deciduous woodland. | Open grasslands, meadows, or marshes for foraging close to isolated, dense-topped trees for nesting and perching.       |
| northern harrier          | None                   | None                 | DFG-Species of Special Concern; IUCN-Least Concern                                     | Coastal salt & fresh-water marsh. Nest & forage in grasslands, from salt grass in desert sink to mountain cienagas. | Nests on ground in shrubby vegetation, usually at marsh edge; nest built of a large mound of sticks in wet areas.       |
| sharp-shinned hawk        | None                   | None                 | DFG-Watch List   | Ponderosa pine, black oak, riparian deciduous, mixed conifer & Jeffrey pine habitats. Prefers riparian areas.       | North-facing slopes, with plucking perches are critical requirements. Nests usually within 275 ft of water.             |
| Cooper's hawk             | None                   | None                 | DFG-Watch List; IUCN-Least Concern   | Woodland, chiefly of open, interrupted or marginal type.  | Nest sites mainly in riparian growths of deciduous trees, as in canyon bottoms on river flood-plains; also, live oaks.  |
| northern goshawk          | None                   | None                 | BLM-Sensitive; CDF-Sensitive; DFG-Species of Special Concern; IUCN-Least Concern;      | Within, and in vicinity of, coniferous forest. Uses old nests, and maintains alternate sites.                       | Usually nests on north slopes, near water. Red fir, lodgepole pine, Jeffrey pine, and aspens are typical nest trees.    |
| Harris' hawk              | None                   | None                 | DFG-Watch List; IUCN-Least Concern   | Was in lower Colorado River & Imperial Valley in riparian forests of cottonwoods near mesquite thickets.            | Deciduous woods and adjacent open ground, of river or delta bottomlands.  |
| ferruginous hawk          | None                   | None                 | DFG-Watch List; IUCN-Least Concern; USFWS-Birds of Conservation Concern                | Open grasslands, sagebrush flats, desert scrub, low foothills & fringes of pinyon-juniper habitats.                 | Eats mostly lagomorphs, ground squirrels, and mice. Population trends may follow lagomorph population cycles.           |
| golden eagle              | None                   | None                 | CDF-Sensitive; DFG-Fully Protected; DFG-Watch List; IUCN-Least Concern; USFWS-Birds of | Rolling foothills, mountain areas, sage-juniper flats, & desert.  | Cliff-walled canyons provide nesting habitat in most parts of range; also, large trees in open areas.                   |
| merlin                    | None                   | None                 | DFG-Watch List; IUCN-Least Concern   | Seacoast, tidal estuaries, open woodlands, savannahs, edges of grasslands & deserts, farms & ranches.               | Clumps of trees or windbreaks are required for roosting in open country.  |
| prairie falcon            | None                   | None                 | DFG-Watch List; IUCN-Least Concern; USFWS-Birds of Conservation Concern                | Inhabits dry, open terrain, either level or hilly.  | Breeding sites located on cliffs. Forages far afield, even to marshlands and ocean shores.                              |

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| Common name              | Federal listing status | Calif listing status | Other Status  | General Habitat  | Micro Habitat   |
|--------------------------|------------------------|----------------------|---|--|---|
| ruffed grouse            | None                   | None                 | DFG-Watch List; IUCN-Least Concern  | Extreme northern humid coastal strip, in Del Norte, Humboldt, and Siskiyou counties.   | Inhabits dense canyon-bottom or stream-side growths, usually of mixed deciduous and coniferous trees.                             |
| greater sage-grouse      | None                   | None                 | ABC-Watch List of Birds of Conservation Concern; BLM-Sensitive; DFG-Species of Special Concern; | Found in the northeastern, Great Basin portion of state.   | Restricted to flat/rolling terrain vegetated by sage-brush, upon which it depends for both food and shelter.                      |
| yellow rail              | None                   | None                 | ABC-Watch List of Birds of Conservation Concern; DFG-Species of Special Concern;                | Summer resident in eastern Sierra Nevada in Mono County.   | Fresh-water marshlands.   |
| lesser sandhill crane    | None                   | None                 | DFG-Species of Special Concern  |  |   |
| California gull          | None                   | None                 | DFG-Watch List; IUCN-Least Concern  | Littoral waters, sandy beaches, waters & shorelines of bays, tidal mud-flats, marshes, lakes, etc.                             | Colonial nester on islets in large interior lakes, either fresh or strongly alkaline.   |
| gull-billed tern         | None                   | None                 | ABC-Watch List of Birds of Conservation Concern; DFG-Species of Special Concern;                | Only known breeding colonies in Imperial & Riverside Counties.   | Nests on low, sandy islets. Known to feed on fishes at mouth of Colorado River and on grasshoppers in alfalfa fields.             |
| Caspian tern             | None                   | None                 | IUCN-Least Concern; USFWS-Birds of Conservation Concern   | Nests on sandy or gravelly beaches and shell banks in small colonies inland and along the coast.                               | Inland fresh-water lakes and marshes; also, brackish or salt waters of estuaries and bays.  |
| black skimmer            | None                   | None                 | ABC-Watch List of Birds of Conservation Concern; DFG-Species of Special Concern;                | Nests on gravel bars, low islets, and sandy beaches, in unvegetated sites. Nesting colonies usually less than 200 pairs.       |   |
| rhinoceros auklet        | None                   | None                 | DFG-Watch List; IUCN-Least Concern  | Off-shore islands and rocks along the California coast.  | Nests in a burrow on undisturbed, forested and unforested islands, and probably in cliff caves on the mainland.                   |
| tufted puffin            | None                   | None                 | DFG-Species of Special Concern; IUCN-Least Concern  | Open-ocean bird; nests along the coast on islands, islets, or (rarely) mainland cliffs.  | Requires sod or earth into which the birds can burrow, on island cliffs or grassy island slopes.                                  |
| burrowing owl            | None                   | None                 | BLM-Sensitive; DFG-Species of Special Concern; IUCN-Least Concern; USFWS-Birds of               | Open, dry annual or perennial grasslands, deserts & scrublands characterized by low-growing vegetation.                        | Subterranean nester, dependent upon burrowing mammals, most notably, the California ground squirrel.                              |
| long-eared owl           | None                   | None                 | DFG-Species of Special Concern; IUCN-Least Concern  | Riparian bottomlands grown to tall willows & cottonwoods; also, belts of live oak paralleling stream courses.                  | Require adjacent open land productive of mice and the presence of old nests of crows, hawks, or magpies for breeding.             |
| short-eared owl          | None                   | None                 | ABC-Watch List of Birds of Conservation Concern; DFG-Species of Special Concern;                | Found in swamp lands, both fresh and salt; lowland meadows; irrigated alfalfa fields.  | Tule patches/tall grass needed for nesting/daytime seclusion. Nests on dry ground in depression concealed in vegetation.          |
| black swift              | None                   | None                 | ABC-Watch List of Birds of Conservation Concern; DFG-Species of Special Concern;                | Coastal belt of Santa Cruz & Monterey Co; central & southern Sierra Nevada; San Bernardino & San Jacinto Mountains.            | Breeds in small colonies on cliffs behind or adjacent to waterfalls in deep canyons and sea-bluffs above the surf; forages widely |
| Costa's hummingbird      | None                   | None                 | ABC-Watch List of Birds of Conservation Concern; IUCN-Least Concern                             | Desert riparian, desert and arid scrub foothill habitats.  |   |
| vermillion flycatcher    | None                   | None                 | DFG-Species of Special Concern; IUCN-Least Concern  | During nesting, inhabits desert riparian adjacent to irrigated fields, irrigation ditches, pastures, & other open, mesic areas | Nest in cottonwood, willow, mesquite, and other large desert riparian trees.  |
| brown-crested flycatcher | None                   | None                 | DFG-Watch List; IUCN-Least Concern  | Inhabits desert riparian along Colorado River, as well as other desert oases & riparian area NW to Victorville.                | Requires riparian thickets, trees, snags, and shrubs for foraging perches, nesting cavities, and cover.                           |
| California horned lark   | None                   | None                 | DFG-Watch List; IUCN-Least Concern  | Coastal regions, chiefly from Sonoma Co. to San Diego Co. Also main part of San Joaquin Valley & east to foothills.            | Short-grass prairie, "bald" hills, mountain meadows, open coastal plains, fallow grain fields, alkali flats.                      |
| purple martin            | None                   | None                 | DFG-Species of Special Concern; IUCN-Least Concern  | Inhabits woodlands, low elevation coniferous forest of Douglas-fir, ponderosa pine, & Monterey pine.                           | Nests in old woodpecker cavities mostly, also in human-made structures. Nest often located in tall, isolated tree/snag.           |
| yellow-billed magpie     | None                   | None                 | ABC-Watch List of Birds of Conservation Concern; IUCN-Least Concern; USFWS-Birds of             | Central Valley and coastal mountain ranges from south of San Francisco to Santa Barbara Co.                                    | Open oak & riparian woodland, farm & ranchland or urban areas with tall trees near grassland, pasture or cropland.                |

**Table J-1. List of Animal Species Considered in this SEIR**

| Common name                                | Federal listing status | Calif listing status | Other Status   | General Habitat   | Micro Habitat   |
|--|------------------------|----------------------|--|---|---|
| black-capped chickadee                     | None                   | None                 | DFG-Watch List; IUCN-Least Concern   | Inhabits riparian woodlands in Del Norte and northern Humboldt counties.  | Mainly found in deciduous tree-types, especially willows and alders, along large or small watercourses.                     |
| coastal cactus wren                        | None                   | None                 | DFG-Species of Special Concern; USFS-Sensitive; USFWS-Birds of Conservation          | Southern California coastal sage scrub.   | Wrens require tall opuntia cactus for nesting and roosting.   |
| black-tailed gnatcatcher                   | None                   | None                 | IUCN-Least Concern   | Primarily inhabits wooded desert wash habitats; also occurs in desert scrub habitat, especially in winter.                    | Nests in desert washes containing mesquite, paloverde, ironwood, acacia; absent from areas where salt cedar introduced.     |
| Bendire's thrasher                         | None                   | None                 | ABC-Watch List of Birds of Conservation Concern; BLM-Sensitive; DFG-Species of       | Migratory; local spring/summer resident in flat areas of desert succulent shrub/Joshua tree habitats in Mojave Desert.        | Nests in cholla, yucca, paloverde, thorny shrub, or small tree, usually 0.5 to 20 feet above ground.                        |
| Crissal thrasher                           | None                   | None                 | DFG-Species of Special Concern; IUCN-Least Concern                                   | Resident of southeastern deserts in desert riparian and desert wash habitats.   | Nests in dense vegetation along streams/washes; mesquite, screwbean mesquite, ironwood, catclaw, acacia, arrowweed, willow. |
| Le Conte's thrasher                        | None                   | None                 | ABC-Watch List of Birds of Conservation Concern; DFG-Species of Special Concern;     | Desert resident; primarily of open desert wash, desert scrub, alkali desert scrub, and desert succulent scrub habitats.       | Commonly nests in a dense, spiny shrub or densely branched cactus in desert wash habitat, usually 2-8 feet above ground.    |
| loggerhead shrike                          | None                   | None                 | DFG-Species of Special Concern; IUCN-Least Concern; USFWS-Birds of Conservation      | Broken woodlands, savannah, pinyon-juniper, Joshua tree, & riparian woodlands, desert oases, scrub & washes.                  | Prefers open country for hunting, with perches for scanning, and fairly dense shrubs and brush for nesting.                 |
| gray vireo                                 | None                   | None                 | ABC-Watch List of Birds of Conservation Concern; BLM-Sensitive; DFG-Species of       | Dry chaparral; west of desert, in chamise-dominated habitat; mountains of Mojave Desert, associated with juniper & Artemisia. | Forage, nest, and sing in areas formed by a continuous growth of twigs, 1-5 ft above ground.                                |
| Virginia's warbler                         | None                   | None                 | ABC-Watch List of Birds of Conservation Concern; DFG-Watch List; IUCN-Least Concern; | East slope of Southern Sierra Nevada, in arid, shrubby, mixed-conifer, pinyon-juniper, montane-chaparral. 7000-9000 ft        | Nests on arid slopes w/ stands of tall shrubs/scattered trees; also, riparian thickets of willow/wild rose along streams.   |
| Lucy's warbler                             | None                   | None                 | ABC-Watch List of Birds of Conservation Concern; DFG-Species of Special Concern;     | Lower Colorado River Valley & the washes & arroyos emptying into it.  | Partial to thickets of mesquite, riparian scrub & even stands of tamarisk.  |
| Sonoran yellow warbler                     | None                   | None                 | DFG-Species of Special Concern; USFWS-Birds of Conservation Concern                  | Summer resident of Colorado River Valley, in riparian deciduous habitat. Below 600 ft elev.                                   | Inhabits cottonwoods and willows, particularly the crown foliage; nests in understory, usually 2-16 ft above ground.        |
| yellow warbler                             | None                   | None                 | DFG-Species of Special Concern; USFWS-Birds of Conservation Concern                  | Riparian plant associations. Prefers willows, cottonwoods, aspens, sycamores, & alders for nesting & foraging.                | Also nests in montane shrubbery in open conifer forests.  |
| saltmarsh common yellowthroat              | None                   | None                 | DFG-Species of Special Concern; USFWS-Birds of Conservation Concern                  | Resident of the San Francisco Bay region, in fresh and salt water marshes.  | Requires thick, continuous cover down to water surface for foraging; tall grasses, tule patches, willows for nesting.       |
| yellow-breasted chat                       | None                   | None                 | DFG-Species of Special Concern; IUCN-Least Concern                                   | Summer resident; inhabits riparian thickets of willow & other brushy tangles near watercourses.                               | Nests in low, dense riparian, consisting of willow, blackberry, wild grape; forages and nests within 10 ft of ground.       |
| hepatic tanager                            | None                   | None                 | DFG-Watch List; IUCN-Least Concern   | White fir-pinyon forest on desert peaks, 5300-8100 ft elev. Understory of xerophytic shrubs.                                  |   |
| summer tanager                             | None                   | None                 | DFG-Species of Special Concern; IUCN-Least Concern                                   | Summer resident of desert riparian along lower Colorado River, & locally elsewhere in California deserts.                     | Requires cottonwood-willow riparian for nesting and foraging; prefers older, dense stands along streams.                    |
| northern cardinal                          | None                   | None                 | DFG-Watch List; IUCN-Least Concern   | Extremely rare resident along the Colorado River.   | Dense brushy river bottom thickets, well-vegetated dry washes & dense desert scrub.   |
| Abert's towhee                             | None                   | None                 | ABC-Watch List of Birds of Conservation Concern; IUCN-Least Concern                  | Desert riparian and desert wash habitats in the lower Colorado River Valley, also the Imperial & Coachella valleys.           | Frequents dense vegetation, thickets of willow, cottonwood, mesquite, & saltcedar.  |
| southern California rufous-crowned sparrow | None                   | None                 | DFG-Watch List   | Resident in Southern California coastal sage scrub and sparse mixed chaparral.  | Frequents relatively steep, often rocky hillsides with grass & forb patches.  |
| Brewer's sparrow                           | None                   | None                 | ABC-Watch List of Birds of Conservation Concern; IUCN-Least Concern; USFWS-Birds of  | East of Cascade-Sierra Nevada crest, mountains & high valleys of Mojave Desert & mountains at south end of San Joaquin Valley | For nesting they prefer high sagebrush plains, slopes & valley with Great Basin sagebrush & antelope brush.                 |

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| Common name                   | Federal listing status | Calif listing status | Other Status  | General Habitat  | Micro Habitat   |
|-------------------------------|------------------------|----------------------|---|--|---|
| Bell's sage sparrow           | None                   | None                 | ABC-Watch List of Birds of Conservation Concern; DFG-Watch List; USFWS-Birds of | Nests in chaparral dominated by fairly dense stands of chamise. Found in coastal sage scrub in south of range.                     | Nest located on the ground beneath a shrub or in a shrub 6-18 inches above ground. Territories about 50 yds apart.        |
| large-billed savannah sparrow | None                   | None                 | DFG-Species of Special Concern  | Breeds along the Colorado River delta in Mexico; winters at the Salton Sea.  | Saline emergent wetlands at the Salton Sea and southern coast.  |
| grasshopper sparrow           | None                   | None                 | DFG-Species of Special Concern; IUCN-Least Concern                              | Dense grasslands on rolling hills, lowland plains, in valleys & on hillsides on lower mountain slopes.                             | Favors native grasslands with a mix of grasses, forbs & scattered shrubs. Loosely colonial when nesting.                  |
| Suisun song sparrow           | None                   | None                 | DFG-Species of Special Concern; USFWS-Birds of Conservation Concern             | Resident of brackish-water marshes surrounding Suisun Bay.   | Inhabits cattails, tules and other sedges, and Salicornia; also known to frequent tangles bordering sloughs.              |
| Alameda song sparrow          | None                   | None                 | DFG-Species of Special Concern; USFWS-Birds of Conservation Concern             | Resident of salt marshes bordering south arm of San Francisco Bay.   | Inhabits Salicornia marshes; nests low in Grindelia bushes (high enough to escape high tides) and in Salicornia.          |
| San Pablo song sparrow        | None                   | None                 | DFG-Species of Special Concern; USFWS-Birds of Conservation Concern             | Resident of salt marshes along the north side of San Francisco and San Pablo bays.   | Inhabits tidal sloughs in the Salicornia marshes; nests in Grindelia bordering slough channels.                           |
| gray-headed junco             | None                   | None                 | DFG-Watch List  | Summer resident of Clark Mountain (eastern San Bernardino County) & Grapevine Mtns (Inyo County).                                  | Inhabits white fir association at 7300 ft (Clark Mountain); also, from dense pinyons above 6700 ft (Grapevine Mountains). |
| tricolored blackbird          | None                   | None                 | ABC-Watch List of Birds of Conservation Concern; BLM-Sensitive; DFG-Species of  | Highly colonial species, most numerous in Central Valley & vicinity. Largely endemic to California.                                | Requires open water, protected nesting substrate, & foraging area with insect prey within a few km of the colony.         |
| yellow-headed blackbird       | None                   | None                 | DFG-Species of Special Concern; IUCN-Least Concern                              | Nests in freshwater emergent wetlands with dense vegetation & deep water. Often along borders of lakes or ponds.                   | Nests only where large insects such as Odonata are abundant, nesting timed with maximum emergence of aquatic insects.     |
| Kern brook lamprey            | None                   | None                 | AFS-Threatened; DFG-Species of Special Concern; IUCN-Near Threatened            | San Joaquin River system and Kern River.   | Gravel-bottomed areas for spawning and muddy-bottomed areas where ammocoetes can burrow and feed.                         |
| Pit-Klamath brook lamprey     | None                   | None                 | AFS-Vulnerable  | In California it is found only in the Pit River system.  | Low-gradient reaches of clear, cool rivers and streams with sand-mud bottoms or edges.                                    |
| Pacific lamprey               | None                   | None                 | AFS-Vulnerable  | Found in Pacific Coast streams north of San Luis Obispo Co., however regular runs in Santa Clara River. Size of runs is declining. | Swift-current gravel bottomed areas for spawning with water temps between 12-18 C. Ammocoetes need soft sand or mud.      |
| Goose Lake lamprey            | None                   | None                 | AFS-Vulnerable; DFG-Species of Special Concern; USFS-Sensitive                  | Adults live in shallow, alkaline Goose Lake.   | Require gravel riffles in streams for spawning. Ammocoetes require muddy backwater habitats downstream of spawning areas. |
| Klamath River lamprey         | None                   | None                 | AFS-Threatened; DFG-Species of Special Concern                                  | Upper Klamath River and upper Klamath Lake.  | Adults need coarser gravel-rubble substrate for spawning. Ammocoetes need sand/mud substrate in shallow pools.            |
| riffle sculpin                | None                   | None                 |   |  |   |
| bigeye marbled sculpin        | None                   | None                 | AFS-Vulnerable; DFG-Species of Special Concern                                  | Found in the Pit River system & 3 tributaries - Hat Creek, Burney Creek & the Fall River system.                                   | Large, clear, cool spring-fed streams, but sometimes found in reservoirs. Prefers abundant vegetation & coarse substrates |
| Upper Klamath marbled sculpin | None                   | None                 |   |  |   |
| Lower Klamath marbled sculpin | None                   | None                 |   |  |   |
| reticulate sculpin            | None                   | None                 | DFG-Species of Special Concern  | Streams on the California/Oregon border that drain north into the Rogue River & the middle fork of the Applegate River.            | Tolerant of fairly high fluctuations of water temperature. Can tolerate water temps to 30 C & salinities to 18 ppt.       |
| white sturgeon                | None                   | None                 | AFS-Endangered; IUCN-Least Concern  | Live in estuaries of large rivers, moving into freshwater to spawn. Most abundant in brackish portions of estuaries.               | In estuaries adults concentrate in deep areas with soft bottoms.  |

**Table J-1. List of Animal Species Considered in this SEIR**

| Common name  | Federal listing status | Calif listing status | Other Status  | General Habitat   | Micro Habitat   |
|--|------------------------|----------------------|---|---|---|
| pink salmon  | None                   | None                 | DFG-Species of Special Concern  | Most spawn in intertidal or lower reaches of streams & rivers in Sept & Oct. Move further upstream in Sacramento River.                                     | Optimal temp = 5.6 to 14.4 C. Embryos & alevins require fast-flowing, well oxygenated water for development & survival. |
| chum salmon  | None                   | None                 | DFG-Species of Special Concern  | Short freshwater & extensive marine life stage. Especially dependent upon estuaries during non-migratory juvenile stage                                     | Select spawning sites where there are good intragravel flows with optimum spawning temps of 7.2 - 12.8 C.               |
| chinook salmon - spring-run Klamath-Trinity River    | None                   | None                 | DFG-Species of Special Concern; USFS-Sensitive  | Spring-run chinook in the Trinity River & the Klamath River upstream of the mouth of the Trinity River.   | Major limiting factor for juvenile chinook salmon is temperature, which strongly effects growth & survival.             |
| chinook salmon - Central Valley fall / late fall-run | None                   | None                 | AFS-Vulnerable; DFG-Species of Special Concern; NMFS-Species of Concern; USFS-Sensitive | Populations spawning in the Sacramento & San Joaquin rivers and their tributaries.  |   |
| coast cutthroat trout                                | None                   | None                 | AFS-Vulnerable; DFG-Species of Special Concern; USFS-Sensitive                          | Small coastal streams from the Eel River to the Oregon border.  | Small, low gradient coastal streams & estuaries. Need shaded streams with water temps <18C, & small gravel for spawning |
| Eagle Lake rainbow trout                             | None                   | None                 | AFS-Threatened; DFG-Species of Special Concern; USFS-Sensitive                          | Endemic to Eagle Lake, Lassen County, & its main tributaries, Pine and Papoose creeks.  |   |
| Kern River rainbow trout                             | None                   | None                 | AFS-Threatened; DFG-Species of Special Concern  | Endemic to the upper Kern River & its tributaries.  | Cool, clear, fast flowing streams where riffles are abundant.   |
| Goose Lake redband trout                             | None                   | None                 | AFS-Vulnerable; DFG-Species of Special Concern; USFS-Sensitive                          | Found only in the Goose Lake drainage in California & Oregon. Spawns in high elevation sections of tributary streams.                                       | Can survive temps of 15-20 C, high alkalinities & high turbidity. Requires access from the lake to the spawning areas.  |
| McCloud River redband trout                          | None                   | None                 | AFS-Vulnerable; DFG-Species of Special Concern; USFS-Sensitive                          | Lives in small spring fed tributaries of the McCloud River.   | Water temperatures are cold (<15 C), flow is 1-40 CFS.  |
| Warner Valley redband trout                          | None                   | None                 | AFS-Vulnerable; USFS-Sensitive  | Only present in the Warner Lakes Basin, in the extreme northeastern portion of California.  |   |
| Volcano Creek golden trout                           | None                   | None                 | AFS-Threatened; DFG-Species of Special Concern; USFS-Sensitive                          | Native to Kern Plateau in wide, shallow & exposed streams with little riparian vegetation. Transplanted to other waters.                                    | Stream bottoms of sand, gravel & some cobble. water is clear & usually cold, but summer temps can vary from 3 to 22 C.  |
| summer-run steelhead trout                           | None                   | None                 | DFG-Species of Special Concern  | No. Calif coastal streams south to Middle Fork Eel River. Within range of Klamath Mtns province ESU & No. Calif ESU.  | Cool, swift, shallow water & clean loose gravel for spawning, & suitably large pools in which to spend the summer.      |
| mountain whitefish                                   | None                   | None                 |   |   |   |
| Eagle Lake tui chub                                  | None                   | None                 | DFG-Species of Special Concern  | Found only in Eagle Lake, Lassen County.  | Requires beds of aquatic vegetation in shallow, inshore areas for successful spawning.                                  |
| Cow Head tui chub                                    | None                   | None                 | AFS-Endangered; DFG-Species of Special Concern  | Known only from the Cow Head sub-basin of the Warner Basin.   | Need sufficient water to maintain the large pools that support the fish, especially during drought years.               |
| Lahontan Lake tui chub                               | None                   | None                 | DFG-Species of Special Concern; USFS-Sensitive  | Inhabits large, deep lakes. Tolerates a wide range of physiochemical water conditions.  | Spawns in near-shore shallow areas over beds of aquatic vegetation.   |
| Goose Lake tui chub                                  | None                   | None                 | AFS-Threatened; DFG-Species of Special Concern; USFS-Sensitive                          | Confined to the Goose Lake Basin of Oregon and California.  | Chubs prefer pools & are generally not found in swift water. They've been found in habitats with temps from 9-29 C.     |
| Pit River tui chub                                   | None                   | None                 |   |   |   |
| blue chub  | None                   | None                 | DFG-Species of Special Concern  | Abundant in lakes, but found in a variety of habitats, from small streams & rivers to shallow reservoirs & deep lakes.                                      | Most abundant in warm, quiet waters with mixed substrates. Spawns over shallow rocky areas.                             |
| arroyo chub  | None                   | None                 | AFS-Vulnerable; DFG-Species of Special Concern; USFS-Sensitive                          | Native to streams from Malibu Cr to San Luis Rey River basin. Introduced into streams in Santa Clara, Ventura, Santa Ynez, Mohave & San Diego river basins. | Slow water stream sections with mud or sand bottoms. Feeds heavily on aquatic vegetation & associated invertebrates.    |

**Table J-1. List of Animal Species Considered in this SEIR**

| Common name                      | Federal listing status | Calif listing status | Other Status  | General Habitat  | Micro Habitat  |
|----------------------------------|------------------------|----------------------|---|--|--|
| Clear Lake hitch                 | None                   | None                 | AFS-Vulnerable; DFG-Species of Special Concern; USFS-Sensitive  | Found only in Clear Lake, Lake Co, and associated ponds. Spawns in streams flowing into Clear Lake.                      | Adults found in the limnetic zone. Juveniles found in the nearshore shallow-water habitat hiding in the vegetation.        |
| Central Valley hitch             | None                   | None                 |   |  |  |
| Pajaro/Salinas hitch             | None                   | None                 |   |  |  |
| San Joaquin roach                | None                   | None                 | DFG-Species of Special Concern                                  | Tributaries to the San Joaquin River from the Cosumnes River south.  |  |
| Tomales roach                    | None                   | None                 | DFG-Species of Special Concern                                  | Tributaries to Tomales Bay.  |  |
| Navarro roach                    | None                   | None                 | DFG-Species of Special Concern                                  | Habitat generalists. Found in warm intermittent streams as well as cold, well-aerated streams.                           |  |
| Gualala roach                    | None                   | None                 | DFG-Species of Special Concern                                  | Found only in the Gualala River.   |  |
| Monterey roach                   | None                   | None                 | DFG-Species of Special Concern                                  | Tributaries to Monterey Bay, specifically the Salinas, Pajaro, & San Lorenzo drainages.                                  |  |
| Pit roach                        | None                   | None                 | AFS-Vulnerable; DFG-Species of Special Concern                  | Found in the upper Pit River and its tributaries, and tributaries to Goose Lake.   | Found in deep pools, but also in areas of low flows, moderate gradients, warm temperatures and mats of vegetation.         |
| Red Hills roach                  | None                   | None                 | AFS-Vulnerable; BLM-Sensitive; DFG-Species of Special Concern   | Small streams near Sonora.   | Found in areas with serpentine soil.   |
| Clear Lake - Russian River roach | None                   | None                 |   |  |  |
| hardhead                         | None                   | None                 | DFG-Species of Special Concern; USFS-Sensitive                  | Low to mid-elevation streams in the Sacramento-San Joaquin drainage. Also present in the Russian River.                  | Clear, deep pools with sand-gravel-boulder bottoms & slow water velocity. Not found where exotic centrarchids predominate. |
| Sacramento splittail             | None                   | None                 | AFS-Vulnerable; DFG-Species of Special Concern; IUCN-Endangered | Endemic to the lakes and rivers of the Central Valley, but now confined to the Delta, Suisun Bay & associated marshes.   | Slow moving river sections, dead end sloughs. Requires flooded vegetation for spawning & foraging for young.               |
| Amargosa Canyon speckled dace    | None                   | None                 | AFS-Threatened; BLM-Sensitive; DFG-Species of Special Concern   | Found only in Amargosa Canyon and tributaries of the Amargosa River, esp. Willow Creek & Willow Creek Reservoir.         | Prefers pools with relatively deep water (0.5 - 0.75 m) and slow water velocity.   |
| Long Valley speckled dace        | None                   | None                 | AFS-Endangered  | Found only in Long Valley in the Owens River drainage.   |  |
| Owens speckled dace              | None                   | None                 | AFS-Threatened; DFG-Species of Special Concern                  | Small streams and springs in Owens Valley.   | Occupies a variety of habitats. Rarely found in water > 29 C.  |
| Santa Ana speckled dace          | None                   | None                 | AFS-Threatened; DFG-Species of Special Concern; USFS-Sensitive  | Headwaters of the Santa Ana and San Gabriel rivers. May be extirpated from the Los Angeles River system.                 | Requires permanent flowing streams with summer water temps of 17-20 C. Usually inhabits shallow cobble and gravel riffles. |
| Owens sucker                     | None                   | None                 | DFG-Species of Special Concern                                  | Endemic to the Owens River drainage. In its native river habitat it is most common in areas with long runs & few riffles | Adults can thrive in reservoirs, but need gravelly riffles in tributary streams for spawning.                              |
| flannelmouth sucker              | None                   | None                 |   | Colorado River bordering California.   | Spawns in riffles, usually over a substrate of coarse gravel.  |
| Goose Lake sucker                | None                   | None                 | AFS-Vulnerable; DFG-Species of Special Concern; USFS-Sensitive  | Restricted to the Goose Lake Basin.  | Spawns in Goose Lake tributary streams. Adults found in streams & lake all year round. feeds on algae & diatoms.           |

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| Common name                                    | Federal listing status | Calif listing status | Other Status   | General Habitat  | Micro Habitat  |
|--|------------------------|----------------------|--|--|--|
| mountain sucker                                | None                   | None                 | DFG-Species of Special Concern   | Restricted to the Lahontan drainage system and the north fork of the Feather River.  | Generally occupy pool-like habitats. Abundance greatest in areas with dense cover.                                       |
| Jenny Creek sucker                             | None                   | None                 | AFS-Vulnerable   | Found only in the isolated upstream areas of Jenny Creek, a tributary to the Klamath River in Oregon.                          | Most abundant in deep, quiet pools and slower-moving stretches.  |
| Klamath largescale sucker                      | None                   | None                 | AFS-Threatened; DFG-Species of Special Concern; IUCN-Near Threatened               | Native to the Klamath River & Lost River-Clear Lake systems of Oregon and California.  | Inhabits both lentic & lotic habitats, but primarily a riverine fish, they migrate upstream to spawn in spring.          |
| Amargosa pupfish                               | None                   | None                 | AFS-Vulnerable; BLM-Sensitive; DFG-Species of Special Concern                      | Permanent water sections of the lower Amargosa River.  | Two types of habitat: broad marshes fed by hot springs, and a narrow, steep-sided canyon area with swift flows.          |
| Saratoga Springs pupfish                       | None                   | None                 | AFS-Threatened; DFG-Species of Special Concern                                     | Only known from Saratoga Springs and its outflow in Death Valley.  | A series of marshes and shallow lakes. Water temps vary from 10 to 49 C.   |
| Shoshone pupfish                               | None                   | None                 | AFS-Endangered; DFG-Species of Special Concern                                     | Found in Shoshone Spring and throughout its outlet creek, Inyo Co. Habitat has been drastically altered.                       | Historically the spring pool had clear water over a mud bottom with overhanging banks. Outflow was probably marshy.      |
| Santa Ana (=Shay Creek) threespine stickleback | None                   | None                 | AFS-Endangered   | Native only to Shay Creek & in wet years, Baldwin Lake. Survives in only 3 ponds (see Micro Habitat for description of ponds). | 1-artificial pool in Shay Creek. 2-introduced to pond in Sugarloaf Meadows. 3-introduced to pvt pond near Baldwin Lake.  |
| resident threespine stickleback                | None                   | None                 | USFS-Sensitive   |  |  |
| Sacramento perch                               | None                   | None                 | AFS-Threatened; DFG-Species of Special Concern                                     | Historically found in the sloughs, slow-moving rivers, and lakes of the Central Valley.  | Prefers warm water. Aquatic vegetation is essential for young. Tolerates wide range of physio-chemical water conditions. |
| Russian River tule perch                       | None                   | None                 | AFS-Vulnerable; DFG-Species of Special Concern                                     | Low elevation streams of the Russian River system.   | Requires clear, flowing water with abundant cover. They also require deep (> 1 m) pool habitat.                          |
| Sacramento-San Joaquin tule perch              | None                   | None                 |  |  |  |
| Clear Lake tule perch                          | None                   | None                 |  |  |  |
| Mount Lyell shrew                              | None                   | None                 | DFG-Species of Special Concern; IUCN-Least Concern                                 | High elevation riparian areas in the southern Sierra Nevada.   | Requires moist soil, lives in grass or under willows. Uses logs, stumps, etc. for cover.                                 |
| salt-marsh wandering shrew                     | None                   | None                 | DFG-Species of Special Concern   | Salt marshes of the south arm of San Francisco Bay.  | Medium high marsh 6-8 ft above sea level where abundant driftwood is scattered among salicornia.                         |
| Suisun shrew                                   | None                   | None                 | DFG-Species of Special Concern   | Tidal marshes of the northern shores of San Pablo and Suisun bays.   | Require dense low-lying cover and driftweed and other litter above the mean high tide line for nesting and foraging.     |
| southern California saltmarsh shrew            | None                   | None                 | DFG-Species of Special Concern   | Coastal marshes in Los Angeles, Orange and Ventura counties.   | Requires dense vegetation and woody debris for cover.  |
| Monterey shrew                                 | None                   | None                 | DFG-Species of Special Concern   | Riparian, wetland & upland areas in the vicinity of the Salinas River delta.   | Prefers moist microhabitats. feeds on insects & other invertebrates found under logs, rocks & litter.                    |
| Alameda Island mole                            | None                   | None                 | DFG-Species of Special Concern   | Only known from Alameda Island. Found in a variety of habitats, especially annual & perennial grasslands.                      | Prefers moist, friable soils. avoids flooded soils.  |
| Angel Island mole                              | None                   | None                 |  | Known only from Angel Island in San Francisco Bay.   | Need friable soils for burrowing.  |
| California leaf-nosed bat                      | None                   | None                 | BLM-Sensitive; DFG-Species of Special Concern; IUCN-Least Concern; USFS-Sensitive; | Desert riparian, desert wash, desert scrub, desert succulent scrub, alkali scrub and palm oasis habitats.                      | Needs rocky, rugged terrain with mines or caves for roosting.  |

**Table J-1. List of Animal Species Considered in this SEIR**

| Common name                 | Federal listing status | Calif listing status | Other Status  | General Habitat  | Micro Habitat  |
|-----------------------------|------------------------|----------------------|---|--|--|
| Mexican long-tongued bat    | None                   | None                 | DFG-Species of Special Concern; IUCN-Near Threatened; WBWG-High Priority                | Occasionally found in San Diego Co., which is on the periphery of their range.   | Feeds on nectar & pollen of night-blooming succulents. Roosts in relatively well-lit caves, & in & around buildings.     |
| little brown bat            | None                   | None                 | IUCN-Least Concern; WBWG-Medium Priority  | State rank for San Bernardino Mtns population only. Hibernates in mines or caves. Will use buildings for roosts.                   | Forages near water. Females return to same nursery colonies year after year.   |
| Yuma myotis                 | None                   | None                 | BLM-Sensitive; IUCN-Least Concern; WBWG-Low-Medium Priority                             | Optimal habitats are open forests and woodlands with sources of water over which to feed.  | Distribution is closely tied to bodies of water. Maternity colonies in caves, mines, buildings or crevices.              |
| cave myotis                 | None                   | None                 | BLM-Sensitive; DFG-Species of Special Concern; IUCN-Least Concern; WBWG-Medium Priority | Lowlands of the Colorado River and adjacent mountain ranges.   | Require caves or mines for roosting.   |
| long-eared myotis           | None                   | None                 | BLM-Sensitive; IUCN-Least Concern; WBWG-Medium Priority                                 | Found in all brush, woodland & forest habitats from sea level to about 9000 ft. prefers coniferous woodlands & forests.            | Nursery colonies in buildings, crevices, spaces under bark, & snags. Caves used primarily as night roosts.               |
| fringed myotis              | None                   | None                 | BLM-Sensitive; IUCN-Least Concern; WBWG-High Priority                                   | In a wide variety of habitats, optimal habitats are pinyon-juniper, valley foothill hardwood & hardwood-conifer.                   | Uses caves, mines, buildings or crevices for maternity colonies and roosts.  |
| long-legged myotis          | None                   | None                 | IUCN-Least Concern; WBWG-High Priority  | Most common in woodland & forest habitats above 4000 ft. Trees are important day roosts; caves & mines are night roosts.           | Nursery colonies usually under bark or in hollow trees, but occasionally in crevices or buildings.                       |
| western small-footed myotis | None                   | None                 | BLM-Sensitive; IUCN-Least Concern; WBWG-Medium Priority                                 | Wide range of habitats mostly arid wooded & brushy uplands near water. Seeks cover in caves, buildings, mines & crevices           | Prefers open stands in forests and woodlands. Requires drinking water. Feeds on a wide variety of small flying insects.  |
| Arizona Myotis              | None                   | None                 | DFG-Species of Special Concern; IUCN-Least Concern; WBWG-Medium Priority                | Lowlands of the Colorado River and adjacent desert mountain ranges.  | Need roosting areas in tree hollows, rock crevices, under bridges, etc.  |
| silver-haired bat           | None                   | None                 | IUCN-Least Concern; WBWG-Medium Priority  | Primarily a coastal & montane forest dweller feeding over streams, ponds & open brushy areas.                                      | Roosts in hollow trees, beneath exfoliating bark, abandoned woodpecker holes & rarely under rocks. Needs drinking water. |
| hoary bat                   | None                   | None                 | IUCN-Least Concern; WBWG-Medium Priority  | Prefers open habitats or habitat mosaics, with access to trees for cover & open areas or habitat edges for feeding.                | Roosts in dense foliage of medium to large trees. Feeds primarily on moths. Requires water.                              |
| western red bat             | None                   | None                 | DFG-Species of Special Concern; IUCN-Least Concern; USFS-Sensitive; WBWG-High           | Roosts primarily in trees, 2-40 ft above ground, from sea level up through mixed conifer forests.                                  | Prefers habitat edges & mosaics with trees that are protected from above & open below with open areas for foraging.      |
| western yellow bat          | None                   | None                 | DFG-Species of Special Concern; IUCN-Least Concern; WBWG-High Priority                  | Found in valley foothill riparian, desert riparian, desert wash, and palm oasis habitats.  | Roosts in trees, particularly palms. Forages over water and among trees.   |
| spotted bat                 | None                   | None                 | BLM-Sensitive; DFG-Species of Special Concern; IUCN-Least Concern; WBWG-High Priority   | Occupies a wide variety of habitats from arid deserts and grasslands through mixed conifer forests.                                | Feeds over water and along washes. Feeds almost entirely on moths. Needs rock crevices in cliffs or caves for roosting.  |
| Townsend's big-eared bat    | None                   | None                 | BLM-Sensitive; DFG-Species of Special Concern; IUCN-Least Concern; USFS-Sensitive;      | Throughout California in a wide variety of habitats. Most common in mesic sites.   | Roosts in the open, hanging from walls & ceilings. Roosting sites limiting. extremely sensitive to human disturbance.    |
| pallid bat                  | None                   | None                 | BLM-Sensitive; DFG-Species of Special Concern; IUCN-Least Concern; USFS-Sensitive;      | Deserts, grasslands, shrublands, woodlands & forests. Most common in open, dry habitats with rocky areas for roosting.             | Roosts must protect bats from high temperatures. Very sensitive to disturbance of roosting sites.                        |
| western mastiff bat         | None                   | None                 | BLM-Sensitive; DFG-Species of Special Concern; WBWG-High Priority                       | Many open, semi-arid to arid habitats, including conifer & deciduous woodlands, coastal scrub, grasslands, chaparral etc           | Roosts in crevices in cliff faces, high buildings, trees & tunnels.  |
| pocketed free-tailed bat    | None                   | None                 | DFG-Species of Special Concern; IUCN-Least Concern; WBWG-Medium Priority                | Variety of arid areas in Southern California; pine-juniper woodlands, desert scrub, palm oasis, desert wash, desert riparian, etc. | Rocky areas with high cliffs.  |
| big free-tailed bat         | None                   | None                 | DFG-Species of Special Concern; IUCN-Least Concern; WBWG-Medium-High Priority           | Low-lying arid areas in Southern California.   | Need high cliffs or rocky outcrops for roosting sites. Feeds principally on large moths.                                 |
| White Mountains Pika        | None                   | None                 | IUCN-Vulnerable   | Mountainous areas, generally at higher elevations, often above the treeline up to the limit of vegetation.                         | Talus slopes above 8000 ft, occasionally on mine tailings. Prefers talus-meadow interface.                               |

**Table J-1. List of Animal Species Considered in this SEIR**

| Common name                       | Federal listing status | Calif listing status | Other Status  | General Habitat   | Micro Habitat   |
|-----------------------------------|------------------------|----------------------|---|---|---|
| Taylor pika                       | None                   | None                 |   | Mountainous areas, generally at higher elevations, often above the treeline up to the limit of vegetation. At lower elevations found in rocky areas within forests or near lakes. | Talus slopes, occasionally on mine tailings. Prefers talus-meadow interface.  |
| gray-headed pika                  | None                   | None                 | IUCN-Near Threatened  | Mountainous areas, generally at higher elevations, often above the treeline up to the limit of vegetation. At lower elevations found in rocky areas within forests or near lakes. | Talus slopes, occasionally on mine tailings. Prefers talus-meadow interface.  |
| Yosemite pika                     | None                   | None                 |   | Mountainous areas, generally at higher elevations, often above the treeline up to the limit of vegetation. At lower elevations found in rocky areas within forests or near lakes. | Talus slopes, occasionally on mine tailings. Prefers talus-meadow interface.  |
| Mt. Whitney pika                  | None                   | None                 |   | Mountainous areas, generally at higher elevations, often above the treeline up to the limit of vegetation. At lower elevations found in rocky areas within forests or near lakes. | Talus slopes, occasionally on mine tailings. Prefers talus-meadow interface.  |
| Oregon snowshoe hare              | None                   | None                 | DFG-Species of Special Concern                                    | Above the yellow pine zone in Canadian and Hudsonian provinces in Northern California.  | Alder & willow thickets in riparian zone, also thickets of young conifers.  |
| Sierra Nevada snowshoe hare       | None                   | None                 | DFG-Species of Special Concern                                    | Boreal riparian areas in the Sierra Nevada.   | Thickets of deciduous trees in riparian areas and thickets of young conifers.   |
| western white-tailed jackrabbit   | None                   | None                 | DFG-Species of Special Concern                                    | Sagebrush, subalpine conifer, juniper, alpine dwarf shrub & perennial grassland.  | Open areas with scattered shrubs & exposed flat-topped hills with open stands of trees, brush & herbaceous understorey. |
| San Diego black-tailed jackrabbit | None                   | None                 | DFG-Species of Special Concern                                    | Intermediate canopy stages of shrub habitats & open shrub / herbaceous & tree / herbaceous edges.   | Coastal sage scrub habitats in Southern California.   |
| pygmy rabbit                      | None                   | None                 | BLM-Sensitive; DFG-Species of Special Concern; IUCN-Least Concern | Sagebrush, bitterbrush, & pinyon-juniper habitats in Modoc, Lassen & Mono counties.   | Tall dense, large-shrub stages of sagebrush, greasewood & rabbitbrush. May avoid heavily grazed areas.                  |
| Point Reyes mountain beaver       | None                   | None                 | DFG-Species of Special Concern; IUCN-Least Concern                | Coastal area of Point Reyes in areas of springs or seepages.  | North-facing slopes of hills & gullies in areas overgrown with sword ferns and thimbleberries.                          |
| Sierra Nevada mountain beaver     | None                   | None                 | DFG-Species of Special Concern; IUCN-Least Concern                | Dense growth of small deciduous trees & shrubs, wet soil, & abundance of forbs in the Sierra Nevada & east slope.   | Needs dense understorey for food & cover. Burrows into soft soil. Needs abundant supply of water.                       |
| lodgpole chipmunk                 | None                   | None                 |   | Summits of isolated Piute, San Bernardino, & San Jacinto mountains. Usually found in open-canopy forests.   | Habitat is usually lodgepole pine forests in the San Bernardino Mts & chinquapin slopes in the San Jacinto Mts.         |
| San Bernardino flying squirrel    | None                   | None                 | DFG-Species of Special Concern; USFS-Sensitive                    | Black oak or white fir dominated woodlands between 5200 - 8500 ft in the San Bernardino and San Jacinto ranges.   | Need cavities in trees/snags for nests & cover. Needs nearby water.   |
| Los Angeles pocket mouse          | None                   | None                 | DFG-Species of Special Concern; USFS-Sensitive                    | Lower elevation grasslands & coastal sage communities in and around the Los Angeles Basin.  | Open ground with fine sandy soils. May not dig extensive burrows, hiding under weeds & dead leaves instead.             |
| Palm Springs pocket mouse         | None                   | None                 | BLM-Sensitive; DFG-Species of Special Concern                     | Desert riparian, desert scrub, desert wash & sagebrush habitats. most common in creosote-dominated desert scrub.  | Rarely found on rocky sites. Occurs in all canopy coverage classes.   |
| Jacumba pocket mouse              | None                   | None                 | DFG-Species of Special Concern                                    | Desert riparian, desert scrub, desert wash, coastal scrub & sagebrush.  | Rarely found on rocky sites, uses all canopy coverages.   |
| San Joaquin pocket mouse          | None                   | None                 | BLM-Sensitive   | Typically found in grasslands and blue oak savannas.  | Needs friable soils.  |
| Salinas pocket mouse              | None                   | None                 | DFG-Species of Special Concern                                    | Annual grassland & desert shrub communities in the Salinas Valley.  | Fine-textured, sandy, friable soils. Burrows for cover & nesting.   |
| yellow-eared pocket mouse         | None                   | None                 | BLM-Sensitive   | Known only from four canyons in the Tehachapi Mountains, northeastern Kern County. Elevational range 4000-5300 ft.  | Desert shrub and Joshua tree communities with scattered pinyon pines. Occupies underground burrow when inactive.        |
| Tehachapi pocket mouse            | None                   | None                 | DFG-Species of Special Concern; IUCN-Endangered; USFS-Sensitive   | Arid annual grassland & desert shrub communities, but also taken in fallow grain field & in Russian thistle.  | Burrows for cover & nesting. Aestivates and hibernates during extreme weather. Forages on open ground & under shrubs.   |

**Table J-1. List of Animal Species Considered in this SEIR**

| Common name                         | Federal listing status | Calif listing status | Other Status   | General Habitat   | Micro Habitat   |
|-------------------------------------|------------------------|----------------------|--|---|---|
| big-eared kangaroo rat              | None                   | None                 | DFG-Species of Special Concern                                 | Chaparral-covered slopes of the southern part of the Gabilian Range, in the vicinity of the Pinnacles.                  | Forages under shrubs & in the open. Burrows for cover and for nesting.  |
| Santa Cruz kangaroo rat             | None                   | None                 |  | Silverleaf manzanita mixed chaparral in the Zayante Sand Hills ecosystem of the Santa Cruz Mountains.                   | Needs soft, well-drained sand.  |
| Berkeley kangaroo rat               | None                   | None                 |  | Open grassy hilltops & open spaces in chaparral & blue oak/digger pine woodlands.                                       | Needs fine, deep, well-drained soil for burrowing.  |
| Merced kangaroo rat                 | None                   | None                 |  | Grassland and savanna communities in eastern Merced & Stanislaus counties.  | Needs fine, deep, well-drained soil for burrowing. Granivorous, but also eats forbs & green grasses.                      |
| Marysville California kangaroo rat  | None                   | None                 | BLM-Sensitive; DFG-Species of Special Concern                  | Known only from the Sutter Buttes area.   | Friable soil, grass-forb stages of chaparral.   |
| Argus Mountains kangaroo rat        | None                   | None                 |  | Known only from the Argus Mountain range. Inhabits creosote scrub, saltbush scrub, & Joshua tree woodland.              | Sandy-gravelly soils with an overstory of big sage, pinyon pine, juniper, or yucca.                                       |
| Panamint kangaroo rat               | None                   | None                 |  | Found only in the Panamint Range between 4600 & 7000 ft. in arid mountain steppe communities.                           | Found on coarse-textured soils on sloping ground with an overstory of yucca, pinyon pine, juniper & big sage.             |
| Earthquake Merriam's kangaroo rat   | None                   | None                 |  | Known only from San Diego & Riverside Co. Associated with riverside sage scrub, chaparral, & non-native grassland.      | Need sandy loam substrates for digging of burrows.  |
| short-nosed kangaroo rat            | None                   | None                 | BLM-Sensitive; DFG-Species of Special Concern; IUCN-Vulnerable | Western side of San Joaquin Valley in grassland and desert shrub associations, especially Atriplex.                     | Occurs in highly alkaline soils around Soda Lake. Needs friable soils. Favors flat to gently sloping terrain.             |
| Dulzura pocket mouse                | None                   | None                 | DFG-Species of Special Concern                                 | Variety of habitats including coastal scrub, chaparral & grassland in San Diego Co.                                     | Attracted to grass-chaparral edges.   |
| northwestern San Diego pocket mouse | None                   | None                 | DFG-Species of Special Concern                                 | Coastal scrub, chaparral, grasslands, sagebrush, etc. in western San Diego Co.  | Sandy, herbaceous areas, usually in association with rocks or coarse gravel.  |
| pallid San Diego pocket mouse       | None                   | None                 | DFG-Species of Special Concern                                 | Desert border areas in eastern San Diego Co. in desert wash, desert scrub, desert succulent scrub, pinyon-juniper, etc. | Sandy herbaceous areas, usually in association with rocks or coarse gravel.   |
| Salinas harvest mouse               | None                   | None                 |  | Known only from the Monterey Bay region.  | Occurs in fresh and brackish water wetlands and probably in the adjacent uplands around the mouth of the Salinas River.   |
| Tulare grasshopper mouse            | None                   | None                 | BLM-Sensitive; DFG-Species of Special Concern                  | Hot, arid valleys and scrub deserts in the southern San Joaquin Valley.   | Diet almost exclusively composed of arthropods, therefore needs abundant supply of insects.                               |
| southern grasshopper mouse          | None                   | None                 | DFG-Species of Special Concern                                 | Desert areas, especially scrub habitats with friable soils for digging. Prefers low to moderate shrub cover.            | Feeds almost exclusively on arthropods, especially scorpions & orthopteran insects.                                       |
| Yuma hispid cotton rat              | None                   | None                 | DFG-Species of Special Concern                                 | Along the Colorado River and in grass & agricultural areas near irrigation waters.                                      | Wetlands & uplands with dense grass & herbaceous plants. Makes runways through vegetation. Nests on surface & in burrows. |
| Colorado Valley woodrat             | None                   | None                 |  | Low-lying desert areas in southeastern California. Closely associated with beaver-tail cactus & mesquite.               | Intolerant of cold temps. Eats mainly succulent plants. Distribution influenced by abundance of nest building material    |
| San Diego desert woodrat            | None                   | None                 | DFG-Species of Special Concern                                 | Coastal scrub of Southern California from San Diego County to San Luis Obispo County.                                   | Moderate to dense canopies preferred. They are particularly abundant in rock outcrops & rocky cliffs & slopes.            |
| San Francisco dusky-footed woodrat  | None                   | None                 | DFG-Species of Special Concern                                 | Forest habitats of moderate canopy & moderate to dense understorey. May prefer chaparral & redwood habitats.            | Constructs nests of shredded grass, leaves & other material. May be limited by availability of nest-building materials.   |
| Mohave river vole                   | None                   | None                 | DFG-Species of Special Concern                                 | Occurs only in weedy herbaceous growth in wet areas along the Mojave River. May be found in some irrigated pastures.    | Burrows into soft soil. Feeds on leafy parts of grasses, sedges and herbs. Clips grasses to form runways from burrow.     |

**Table J-1. List of Animal Species Considered in this SEIR**

| Common name               | Federal listing status | Calif listing status | Other Status  | General Habitat  | Micro Habitat  |
|---------------------------|------------------------|----------------------|---|--|--|
| Owens Valley vole         | None                   | None                 | BLM-Sensitive; DFG-Species of Special Concern                                     | Found in wetlands and lush grassy ground in the Owens Valley.  | Needs friable soil for burrowing. Eats grasses, sedges & herbs. Clips grass to make runways leading from burrows.            |
| San Pablo vole            | None                   | None                 | DFG-Species of Special Concern  | Saltmarshes of San Pablo Creek, on the south shore of San Pablo Bay.   | Constructs burrow in soft soil. Feeds on grasses, sedges and herbs. Forms a network of runways leading from the burrow       |
| south coast marsh vole    | None                   | None                 | DFG-Species of Special Concern  | Tidal marshes in Los Angeles, Orange and southern Ventura counties.  |  |
| white-footed vole         | None                   | None                 | DFG-Species of Special Concern; IUCN-Least Concern                                | Mature coastal forests in Humboldt & Del Norte cos. Prefers areas near small, clear streams with dense alder & shrubs.               | Occupies the habitat from the ground surface to the canopy. Feeds in all layers & nests on the ground under logs or rock     |
| Sonoma tree vole          | None                   | None                 | DFG-Species of Special Concern; IUCN-Near Threatened                              | North coast fog belt from Oregon border to Sonoma Co. In Douglas-fir, redwood & montane hardwood-conifer forests.                    | Feeds almost exclusively on Douglas-fir needles. Will occasionally take needles of grand fir, hemlock or spruce.             |
| Point Reyes jumping mouse | None                   | None                 | DFG-Species of Special Concern  | Primarily in bunch grass marshes on the uplands of Point Reyes. Also present in coastal scrub, grassland, and meadows.               | Eats mainly grass seeds w/ some insects & fruit taken. Builds grassy nests on ground under vegetation, burrows in winter     |
| American (=pine) marten   | None                   | None                 | IUCN-Least Concern; USFS-Sensitive  | Mixed evergreen forests with more than 40% crown closure along North Coast & Sierra Nevada, Klamath & Cascade mtns.                  | Needs variety of different-aged stands, particularly old-growth conifers & snags which provide cavities for dens/nests.      |
| Humboldt marten           | None                   | None                 | DFG-Species of Special Concern; USFS-Sensitive                                    | Occurs only in the coastal redwood zone from the Oregon border south to Sonoma County.   | Associated with late-successional coniferous forests, prefer forests with low, overhead cover.                               |
| Sierra marten             | None                   | None                 | USFS-Sensitive  | Mixed evergreen forests with more than 40% crown closure along Sierra Nevada & Cascade mtns.   | Needs variety of different-aged stands, particularly old-growth conifers & snags which provide cavities for dens/nests.      |
| American badger           | None                   | None                 | DFG-Species of Special Concern; IUCN-Least Concern                                | Most abundant in drier open stages of most shrub, forest, and herbaceous habitats, with friable soils.                               | Needs sufficient food, friable soils & open, uncultivated ground. Preys on burrowing rodents. Digs burrows.                  |
| southwestern river otter  | None                   | None                 | DFG-Species of Special Concern  | Aquatic habitats along the Colorado River.   | Needs abundant food sources and sufficient water for shelter and foraging.   |
| Yuma mountain lion        | None                   | None                 | DFG-Species of Special Concern  | Low elevations in the Colorado River Valley of California.   | Live in dense bottomland vegetation, also found in adjacent, rocky uplands.  |
| Nelson's bighorn sheep    | None                   | None                 | BLM-Sensitive; USFS-Sensitive   | Widely distributed from the White Mtns in Mono Co. to the Chocolate Mts in Imperial Co.  | Open, rocky, steep areas with available water and herbaceous forage.   |
| western pond turtle       | None                   | None                 | BLM-Sensitive; DFG-Species of Special Concern; IUCN-Vulnerable; USFS-Sensitive    | A thoroughly aquatic turtle of ponds, marshes, rivers, streams & irrigation ditches with aquatic vegetation below 6000 ft elevation. | Need basking sites and suitable (sandy banks or grassy open fields) upland habitat up to 0.5 km from water for egg-laying.   |
| Panamint alligator lizard | None                   | None                 | BLM-Sensitive; DFG-Species of Special Concern; IUCN-Vulnerable; USFS-Sensitive    | Found in the White & Inyo Mtns to the north & west, & the Panamint Mtns to the south & east; 2800-6800 ft elev.                      | Inhabits areas near permanent water, in canyons, damp gullies, and rocky areas near dense vegetation.                        |
| black legless lizard      | None                   | None                 | DFG-Species of Special Concern; USFS-Sensitive                                    | Sand dunes and sandy soils in the Monterey Bay and Morro Bay regions.  | Inhabit sandy soil/dune areas with bush lupine and mock heather as dominant plants. Moist soil is essential.                 |
| silvery legless lizard    | None                   | None                 | DFG-Species of Special Concern; USFS-Sensitive                                    | Sandy or loose loamy soils under sparse vegetation.  | Soil moisture is essential. they prefer soils with a high moisture content.  |
| banded gila monster       | None                   | None                 | BLM-Sensitive; DFG-Species of Special Concern; IUCN-Near Threatened               | Inhabits the lower slopes of rocky canyons and arroyos, but is also found on desert flats among scrub and succulents.                | Eggs are laid in soil in excavated nests; thus, soil must be sandy or friable. Found in areas moister than surroundings.     |
| flat-tailed horned lizard | None                   | None                 | BLM-Sensitive; DFG-Species of Special Concern; IUCN-Near Threatened               | Restricted to desert washes and desert flats in central Riverside, eastern San Diego, and Imperial counties.                         | Critical habitat element is fine sand, into which lizards burrow to avoid temp extremes; requires vegetative cover and ants. |
| coast horned lizard       | None                   | None                 | BLM-Sensitive; DFG-Species of Special Concern; IUCN-Least Concern; USFS-Sensitive | Frequents a wide variety of habitats, most common in lowlands along sandy washes with scattered low bushes.                          | Open areas for sunning, bushes for cover, patches of loose soil for burial, & abundant supply of ants & other insects.       |

**Table J-1. List of Animal Species Considered in this SEIR**

| Common name   | Federal listing status | Calif listing status | Other Status  | General Habitat  | Micro Habitat  |
|---|------------------------|----------------------|---|--|--|
| northern sagebrush lizard                                 | None                   | None                 | BLM-Sensitive   | Ground dweller, usually found near bushes, brush heaps, logs, or rocks.  | Needs good light, open ground, & scattered low bushes.   |
| Mojave fringe-toed lizard                                 | None                   | None                 | BLM-Sensitive; DFG-Species of Special Concern; IUCN-Least Concern                 | Fine, loose, wind-blown sand in sand dunes, dry lakebeds, riverbanks, desert washes, sparse alkali scrub & desert scrub. | Shrubs or annual plants may be necessary for arthropods found in the diet.   |
| Coronado Island skink                                     | None                   | None                 | BLM-Sensitive; DFG-Species of Special Concern                                     | Grassland, chaparral, pinon-juniper & juniper sage woodland, pine-oak & pine forests in Coast Ranges of Southern Calif.  | Prefers early successional stages or open areas. Found in rocky areas close to streams & on dry hillsides.               |
| orangethroat whiptail                                     | None                   | None                 | DFG-Species of Special Concern; IUCN-Least Concern                                | Inhabits low-elevation coastal scrub, chaparral, and valley-foothill hardwood habitats.                                  | Prefers washes & other sandy areas with patches of brush & rocks. Perennial plants necessary for its major food-termites |
| coastal whiptail  | None                   | None                 |   | Found in deserts & semiarid areas with sparse vegetation and open areas. Also found in woodland & riparian areas.        | Ground may be firm soil, sandy, or rocky.  |
| rosy boa  | None                   | None                 | IUCN-Least Concern; USFS-Sensitive  | Desert & chaparral from the coast to the Mojave & Colorado deserts. prefers moderate to dense vegetation & rocky cover.  | Habitats with a mix of brushy cover & rocky soil such as coastal canyons & hillsides, desert canyons, washes & mountains |
| San Bernardino ringneck snake                             | None                   | None                 | USFS-Sensitive  | Most common in open, relatively rocky areas. Often in somewhat moist microhabitats near intermittent streams.            | Avoids moving through open or barren areas by restricting movements to areas of surface litter or herbaceous veg.        |
| California mountain kingsnake (San Bernardino population) | None                   | None                 | DFG-Species of Special Concern; IUCN-Least Concern; USFS-Sensitive                | Bigcone spruce & chaparral at lower elev. Black oak, incense cedar, Jeffrey pine & ponderosa pine at higher elevations.  | Well-lit canyons with rocky outcrops or rocky talus.   |
| California mountain kingsnake (San Diego population)      | None                   | None                 | DFG-Species of Special Concern; IUCN-Least Concern; USFS-Sensitive                | Restricted to the San Gabriel and San Jacinto mtns of Southern California.   | Inhabits a variety of habitats, including valley-foothill hardwood, coniferous, chaparral, riparian, and wet meadows.    |
| San Joaquin whipsnake                                     | None                   | None                 | DFG-Species of Special Concern  | Open, dry habitats with little or no tree cover. Found in valley grassland & saltbush scrub in the San Joaquin Valley.   | Needs mammal burrows for refuge and oviposition sites.   |
| coast patch-nosed snake                                   | None                   | None                 | DFG-Species of Special Concern  | Brushy or shrubby vegetation in coastal Southern California.   | Require small mammal burrows for refuge and overwintering sites.   |
| south coast garter snake                                  | None                   | None                 | DFG-Species of Special Concern  | Southern California coastal plain from Ventura Co. to San Diego Co., and from sea level to about 850 m.                  | Marsh & upland habitats near permanent water with good strips of riparian vegetation.                                    |
| two-striped garter snake                                  | None                   | None                 | BLM-Sensitive; DFG-Species of Special Concern; IUCN-Least Concern; USFS-Sensitive | Coastal California from vicinity of Salinas to northwest Baja California. From sea to about 7,000 ft elevation.          | Highly aquatic, found in or near permanent fresh water. Often along streams with rocky beds and riparian growth.         |
| red-diamond rattlesnake                                   | None                   | None                 | DFG-Species of Special Concern  | Chaparral, woodland, grassland, & desert areas from coastal San Diego County to the eastern slopes of the mountains.     | Occurs in rocky areas & dense vegetation. Needs rodent burrows, cracks in rocks or surface cover objects.                |
| Mono brine shrimp   | None                   | None                 | IUCN-Conservation Dependent   | Endemic to Mono Lake, located in the Great Basin Desert of Mono County.  | Mono Lake is permanent, clear-water, carbonate-rich, saline lake with 96-ppt TDS, and a pH around 10; temp 4-24 deg C.   |
| pocket pouch fairy shrimp                                 | None                   | None                 |   | In California it is found in Soda Lake, Carrizo Plains. Active only in El Nino years.                                    | Very salt tolerant   |
| midvalley fairy shrimp                                    | None                   | None                 |   | Vernal pools in the Central Valley.  |  |
| California linderiella                                    | None                   | None                 | IUCN-Near Threatened  | Seasonal pools in unplowed grasslands with old alluvial soils underlain by hardpan or in sandstone depressions.          | Water in the pools has very low alkalinity, conductivity, and TDS.   |
| Santa Rosa Plateau fairy shrimp                           | None                   | None                 |   | Found only in the vernal pools on Santa Rosa Plateau in Riverside County.  | Southern basalt flow vernal pools.   |
| hairy water flea  | None                   | None                 |   | Vernal pools. In California, known only from Mather Field.   |  |

**Table J-1. List of Animal Species Considered in this SEIR**

| Common name                         | Federal listing status | Calif listing status | Other Status                   | General Habitat  | Micro Habitat   |
|-------------------------------------|------------------------|----------------------|--------------------------------|--|---|
| Sequoia cave isopod                 | None                   | None                 |                                | Troglophilic.  | Collected in caves, and also near outlet of Big Spring by overturning rocks.  |
| Tomales isopod                      | None                   | None                 |                                | Inhabits localized fresh-water ponds or streams with still or near-still water in several Bay Area counties.             |   |
| Grady's Cave amphipod               | None                   | None                 | IUCN-Vulnerable                | Known only from Central California.  | Mostly found in caves, but one collection from a spring.  |
| Hara's Cave amphipod                | None                   | None                 | IUCN-Vulnerable                | Central California foothills.  | Mostly found in caves & mine tunnels. Also taken from a spring  |
| Wengerors' Cave amphipod            | None                   | None                 | IUCN-Vulnerable                | Known only from two caves in Mariposa County.  | Subterranean groundwater habitats.  |
| An isopod                           | None                   | None                 |                                | Known from Lake, Napa, Marin, Santa Cruz and Santa Clara counties.   |   |
| An isopod                           | None                   | None                 |                                | Spring   |   |
| western tidal-flat tiger beetle     | None                   | None                 |                                | 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.           |
| sandy beach tiger beetle            | None                   | None                 |                                | Inhabits areas adjacent to non-brackish water along the coast of California from San Francisco Bay to northern Mexico.   | Clean, dry, light-colored sand in the upper zone. Subterranean larvae prefer moist sand not affected by wave action.  |
| western beach tiger beetle          | None                   | None                 |                                | Mudflats and beaches in coastal Southern California.   |   |
| senile tiger beetle                 | None                   | None                 |                                | 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.                                    |
| greenest tiger beetle               | None                   | None                 |                                | Inhabits the woodlands adjacent to the Santa Ana River basin.  | Usually found in open spots between trees.  |
| San Joaquin tiger beetle            | None                   | None                 |                                | Known only from Tulare and Kings counties.   |   |
| Carlson's dune beetle               | None                   | None                 |                                | Known primarily from creosote scrub in vicinity of Algodones Dunes, Imperial Co. Also taken from Borrego, San Diego Co.  | Host preferences unknown.   |
| curved-foot hygrotus diving beetle  | None                   | None                 |                                | Aquatic; known only from Alameda & Contra Costa counties.  |   |
| travertine band-thigh diving beetle | None                   | None                 |                                | Aquatic; occurs in the run-off pools from hot springs in a limestone outcrop.  |   |
| Sacramento anthicid beetle          | None                   | None                 | IUCN-Endangered                | Restricted to sand dune areas.   | Inhabit sand slipfaces among bamboo and willow but may not depend on presence of these plant species.                 |
| Antioch Dunes anthicid beetle       | None                   | None                 |                                | Extirpated from Antioch Dunes but present in several localities along the Sacramento and Feather rivers.                 |   |
| globose dune beetle                 | None                   | None                 | IUCN-Vulnerable                | Inhabitant of 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. |
| San Joaquin dune beetle             | None                   | None                 | BLM-Sensitive; IUCN-Vulnerable | Inhabits fossil dunes along the western edge of San Joaquin Valley; extirpated from Antioch Dunes (type locality).       | Inhabits sites containing sandy substrates.   |

**Table J-1. List of Animal Species Considered in this SEIR**

| Common name                                 | Federal listing status | Calif listing status | Other Status | General Habitat  | Micro Habitat  |
|---|------------------------|----------------------|--------------|--|--|
| Hopping's blister beetle                    | None                   | None                 |              | Inhabits the foothills at the southern end of the Central Valley.                                      |  |
| moestan blister beetle                      | None                   | None                 |              | Central California.  |  |
| molestan blister beetle                     | None                   | None                 |              | Inhabits the Central Valley of California, from Contra Costa to Kern and Tulare counties.              |  |
| Morrison's blister beetle                   | None                   | None                 |              | Inhabitant of the southern Central Valley of California.   |  |
| Nelson's miloderes weevil                   | None                   | None                 |              | Eureka Valley  |  |
| Lange's El Segundo Dune weevil              | None                   | None                 |              | Known from El Segundo Dunes.   |  |
| brown tassel trigonoscuta weevil            | None                   | None                 |              | Known only from the Kelso Dunes, San Bernardino County.  |  |
| Dorothy's El Segundo Dune weevil            | None                   | None                 |              | Coastal sand dunes in Los Angeles County.  |  |
| Doyen's trigonoscuta dune weevil            | None                   | None                 |              | Species is restricted to one dune in the Los Medanos area, south of Kettleman Station in Kings County. | Found on an open "slip-face covering about 200 square meters of a modified, vegetated relict dune. |
| Death Valley agabus diving beetle           | None                   | None                 |              | Known only from Carson Slough which drains Ash Meadows; 2200 ft elev.                                  | Appears to inhabit either the very edges or the extreme depths.                                    |
| wooly hydroporus diving beetle              | None                   | None                 |              | Aquatic.   | Known only from Mt. Goethe, Fresno County. Species may be restricted to high elevations.           |
| Leech's skyline diving beetle               | None                   | None                 |              | Aquatic.   |  |
| simple hydroporus diving beetle             | None                   | None                 |              | Known from aquatic habitats in Tuolumne and San Bernardino counties.                                   |  |
| Wawona riffle beetle                        | None                   | None                 |              | Aquatic; found in riffles of rapid, small to medium clear mountain streams; 2000-5000 ft elev.         | Strong preference for inhabiting submerged aquatic mosses  |
| brownish dubiraphian riffle beetle          | None                   | None                 |              | Aquatic; known only from the NE shore of Clear Lake, Lake County.                                      | Inhabits exposed, wave-washed willow roots.  |
| Giuliani's dubiraphian riffle beetle        | None                   | None                 |              | Aquatic; found in the slow part of the Russian River.  | Inhabits rocks and vegetation.   |
| Pinnacles optioservus riffle beetle         | None                   | None                 |              | Aquatic.   | Found on rocks and in gravel of riffles in cool, swift, clear streams.                             |
| Wilbur Springs minute moss beetle           | None                   | None                 |              | Aquatic; known only from Wilbur Hot Springs area, Colusa County; 1250 ft elev.                         | Inhabits the shoreline of the creek at Wilbur Hot Springs.   |
| Leech's chaetarhrian water scavenger beetle | None                   | None                 |              | Aquatic; known only from Hayfork Creek, Trinity County.  |  |
| Ricksecker's water scavenger beetle         | None                   | None                 |              | Aquatic.   |  |

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| Common name                           | Federal listing status | Calif listing status | Other Status                   | General Habitat   | Micro Habitat  |
|---------------------------------------|------------------------|----------------------|--------------------------------|---|--|
| Ciervo aegilian scarab beetle         | None                   | None                 | BLM-Sensitive; IUCN-Vulnerable | Known only from Fresno County in sandy substrates.  |  |
| Kelso Dunes scarab glaresis beetle    | None                   | None                 |                                | Known only from the Kelso Dunes.  |  |
| white sand bear scarab beetle         | None                   | None                 |                                | Inhabit coastal sand dunes of San Luis Obispo County, in the vicinity of Dune Lakes.                                  | Found hovering close to the surface of the dunes near the lake, but some distance from the surf. |
| bumblebee scarab beetle               | None                   | None                 |                                | Inhabits coastal sand dunes from Sonoma County south to San Mateo County.   | Usually flies close to sand surface near the crest of the dunes.                                 |
| Atascadero June beetle                | None                   | None                 |                                | Known only from sand dunes in San Luis Obispo County.   |  |
| Death Valley June beetle              | None                   | None                 |                                | Halophytic species. Larva, pupae & adults found in moist, salt-encrusted soil in the Amargosa River system.           | Larvae taken at roots of <i>Distichlis divaricata</i> .  |
| Tinity Alps ground beetle             | None                   | None                 |                                | Restricted to the Klamath Mountain system of northwestern California. May extend into Oregon.                         |  |
| Siskiyou ground beetle                | None                   | None                 |                                | Restricted to the Klamath Mountain system in northwestern California and southwestern Oregon.                         |  |
| South Forks ground beetle             | None                   | None                 |                                | Restricted to the canyon of the South Fork American River.  |  |
| Algodones sand jewel beetle           | None                   | None                 |                                | Found in and along the old canal on W side of Algodones Dunes, Imperial County.                                       | Found on flowers of <i>Tiquilia plicata</i> during the hottest part of the day in June and July. |
| serpentine cypress wood-boring beetle | None                   | None                 |                                | Larvae develop in Sargent cypress. Restricted to Napa, Colusa, and Lake counties.                                     |  |
| serpentine cypress long-horned beetle | None                   | None                 |                                | Breeds in shaded-out lower branches of Sargent cypress and perhaps McNab cypress in serpentine soil/cypress habitats. |  |
| El Segundo flower-loving fly          | None                   | None                 |                                | Presumed extinct but recently discovered on Malaga Dunes, Los Angeles County.   | Perched dunes.   |
| Antioch efferian robberfly            | None                   | None                 |                                | Known only from Contra Costa and Fresno counties.   |  |
| Hurd's metapogon robberfly            | None                   | None                 |                                | Known only from Antioch (Dunes?) and Fresno.  |  |
| Wilber Springs shore fly              | None                   | None                 |                                | Endemic to Wilbur Hot Springs, Colusa County.   | Inhabits all but the hottest portion of the hot spring effluent; water temp 20-40 deg C.         |
| Belkin's dune tabanid fly             | None                   | None                 | IUCN-Vulnerable                | Inhabits coastal sand dunes of Southern California.   |  |
| Oso Flaco robber fly                  | None                   | None                 |                                | Sand dunes.   |  |
| Wilbur Springs shorebug               | None                   | None                 |                                | Requires springs/creeks with high concentrations of Na, Cl, & Li.   | Found only on wet substrate of spring outflows.  |
| Saratoga Springs belostoman bug       | None                   | None                 |                                | Known only from Saratoga Spring in Death Valley, San Bernardino County.   | Inhabits the hot spring pool and inlet/outlet channels; have been collected year-round.          |

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| Common name                           | Federal listing status | Calif listing status | Other Status                | General Habitat  | Micro Habitat  |
|---------------------------------------|------------------------|----------------------|-----------------------------|--|--|
| Dry Creek cliff strider bug           | None                   | None                 |                             | Known only from Dry Creek in Fresno County.  | Found in cracks & crevices of a sheer rocky cliff moistened by seeping water and under debris at the base of the cliff.  |
| Amargosa naucorid bug                 | None                   | None                 |                             | Endemic to the Amargosa River drainage in Death Valley, Inyo County, and San Bernardino County.                          |  |
| Antioch andrenid bee                  | None                   | None                 |                             | Known only from Antioch Dunes and Oakley.  | Visits flowers of Eriogonum, Gutierrezia californica, Heterotheca grandiflora, Lessingia glandulifera.                   |
| redheaded sphecid wasp                | None                   | None                 |                             | Central California interior dunes.   | Nest in hard-packed sand utilizing abandoned halictine bee burrows.  |
| Antioch sphecid wasp                  | None                   | None                 |                             | Previously known only from Antioch Dunes, in Contra Costa Co. Now known only from the inland sandhills in Santa Cruz Co. |  |
| Stage's dufourine bee                 | None                   | None                 |                             | Species is a ground-nesting bee.   |  |
| Blennosperma vernal pool andrenid bee | None                   | None                 |                             | This bee is oligolectic on vernal pool blennosperma.   | Bees nest in the uplands around vernal pools.  |
| An andrenid bee                       | None                   | None                 |                             | This bee is oligolectic on morning-opening, yellow-flowered spp of Camissonia.   | Nests in deep, sandy soil; the only species in the subgenus Diandrena with aggregated nests associated with depressions. |
| A vernal pool andrenid bee            | None                   | None                 |                             | Collects pollen primarily from Arenaria californica but also Orthocarpus erianthus & Lasthenia sp.                       | Nests in uplands near vernal pools.  |
| Borax Lake cuckoo wasp                | None                   | None                 |                             | Endemic to Central California. Only collection is from the type locality.  | External parasite of wasp and bee larva.   |
| Bradley's cuckoo wasp                 | None                   | None                 |                             |  |  |
| Plute Mountains cuckoo wasp           | None                   | None                 |                             | Known only from the holotype female.   |  |
| A cuckoo wasp                         | None                   | None                 |                             |  |  |
| Menke's cuckoo wasp                   | None                   | None                 |                             |  |  |
| Tulare cuckoo wasp                    | None                   | None                 |                             |  |  |
| Borrego parnopes cuckoo wasp          | None                   | None                 |                             |  |  |
| A mellitid bee                        | None                   | None                 |                             | Desert regions of SW Arizona, SE California, and Baja California, Mexico. Also collected from Torrey Pines, San Diego Co | Earlier records of M. wilmattae pertain to this species; species was synonymized with M. californica in 1981.            |
| haromonius halictid bee               | None                   | None                 | XERCES-Critically Imperiled | Known only from the foothills of the San Bernardino Mts., possibly also the San Jacinto Mts.                             |  |
| Wasbauer's protodufourea bee          | None                   | None                 | XERCES-Data Deficient       | Chaparral and desert scrub.  | Nests in the ground. Oligolectic on Emmenanthe sp., a plant that blooms in profusion after fires, then declines.         |
| Antioch Dunes halictid bee            | None                   | None                 | XERCES-Critically Imperiled | Restricted to Antioch Dunes.   | Host plant is Oenothera deltoides howellii. This bee nests in the ground in stabilized sand dunes in open, xeric areas.  |

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| Common name                              | Federal listing status | Calif listing status | Other Status         | General Habitat  | Micro Habitat  |
|--|------------------------|----------------------|----------------------|--|--|
| A leaf-cutter bee                        | None                   | None                 |                      |  |  |
| a cuckoo bee                             | None                   | None                 |                      |  |  |
| Roberts' rhopalolemma bee                | None                   | None                 |                      | Known only from the type locality 8 km south of Twentynine Palms.  |  |
| Opler's longhorn moth                    | None                   | None                 |                      | From Marin Co & the Oakland area on the inner coast ranges south to Santa Clara Co. One record from Santa Cruz Co.       | All but Santa Cruz site is on serpentine grassland. Larve feed on <i>Platystemon californicus</i> .  |
| Oso Flaco flightless moth                | None                   | None                 |                      | Open, coastal sand dune slopes in San Luis Obispo County.  | Larvae live in tubes attached to buried, green parts of plants at the margin of the active, moving sand dunes.   |
| Henne's eucosman moth                    | None                   | None                 |                      | Endemic to the El Segundo Dunes (type locality), Los Angeles County.   | Larval foodplant is <i>Phacelia ramosissima</i> var <i>austrolitoralis</i> ; larvae can be found on woody stems and upper root parts.                  |
| Sonoma arctic skipper                    | None                   | None                 |                      | Redwood forest.  | Most specimens collected in deep shade or at the edge of forested clearings.   |
| White Mountains skipper                  | None                   | None                 |                      | Above the timberline (above 10,500 ft) in the White Mountains.   | Scree slopes just off of summits & grassy saddles between high ridges & summits. Oviposition on <i>Festuca brachyphylla</i> .                          |
| wandering (=saltmarsh) skipper           | None                   | None                 | IUCN-Near Threatened | Southern California coastal salt marshes.  | Requires moist saltgrass for larval development.   |
| Andrew's marble butterfly                | None                   | None                 |                      | Inhabits yellow pine forest near Lake Arrowhead and Big Bear Lake, San Bernardino Mtns, San Bernardino Co, 5000-6000 ft. | Hostplants are <i>Streptanthus bernardinus</i> & <i>Arabis holboellii</i> var <i>pinetorum</i> ; larval foodplant is <i>Descurainia richardsonii</i> . |
| Hermes copper butterfly                  | None                   | None                 | IUCN-Vulnerable      | Found in southern mixed chaparral & coastal sage scrub at western edge of Laguna Mountains.                              | Host plant is <i>Rhamnus crocea</i> . Although <i>R. crocea</i> is widespread throughout the coast range, <i>Lycaena hermes</i> is not.                |
| Thorne's hairstreak                      | None                   | None                 | BLM-Sensitive        | Associated with the endemic tecate cypress ( <i>Cupressus forbesii</i> ).  | Only known from vicinity of Otay Mountain.   |
| Marin elfin butterfly                    | None                   | None                 |                      | Found only in the redwood forest areas of Marin County.  | Larvae collected and reared on <i>Sedum spathulifolium</i>   |
| Comstock's blue butterfly                | None                   | None                 |                      | Hostplant is <i>Eriogonum</i> sp.  |  |
| Boharts' blue butterfly                  | None                   | None                 |                      | Known from the foothills of the southern Sierra Nevada, near Briceburg, Mariposa County.                                 | Associated with <i>Chorizanthe membranacea</i> .   |
| San Gabriel Mountains blue butterfly     | None                   | None                 |                      | Type locality is a wet meadow seep in yellow pine forest.  | Foodplant is <i>Trifolium wormskioldii</i> .   |
| White Mountains saepiolus blue butterfly | None                   | None                 |                      | Primarily alpine fell-fields, but also wet meadows and along streams at high elevations (>2800 m) in the White Mountains | Principal hostplant is <i>Trifolium andersonii</i> .   |
| San Emigdio blue butterfly               | None                   | None                 |                      | Found in desert canyons and along riverbeds on the southernmost edge of the San Joaquin Valley.                          | Hostplant is <i>Atriplex canescens</i> ; maybe <i>Lotus purshianus</i> also.   |
| Morro Bay blue butterfly                 | None                   | None                 |                      | Inhabits stabilized dunes & adjacent areas of coastal San Luis Obispo & NW Santa Barbara counties.                       | Larval foodplant thought to be <i>Lupinus chamissonis</i> .  |
| Point Reyes blue butterfly               | None                   | None                 |                      | Confined to the Pt. Reyes peninsula, from Pt. Reyes proper north to Tomales Pt.  | Stabilized sand dunes with the common bush <i>Lupinus arboreus</i> & <i>L. varicolor</i> . <i>L. varicolor</i> is the likely foodplant.                |

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| Common name                                  | Federal listing status | Calif listing status | Other Status               | General Habitat  | Micro Habitat  |
|--|------------------------|----------------------|----------------------------|--|--|
| White Mountains icarioides blue butterfly    | None                   | None                 |                            | Found in the White Mountains of the California-Nevada border.  |  |
| Carson Valley silverspot                     | None                   | None                 |                            | Wet meadows along the eastern base of the Carson Range from southern Washoe Co. Nevada to northern Alpine Co. California | Occurs as isolated colonies.   |
| Oso Flaco patch butterfly                    | None                   | None                 |                            | Sand dune habitat around Oso Flaco Lake, San Luis Obispo County.   | Distribution corresponds to its foodplant, <i>Castilleja</i> affinis.  |
| Mono checkerspot butterfly                   | None                   | None                 |                            |  |  |
| Yontocket satyr                              | None                   | None                 |                            | Coastal dunes north of Crescent City in Del Norte County.  | Grassy areas among dunes with coniferous lee slopes & grassy exposed slopes, also dunes around sphagnum bogs             |
| monarch butterfly                            | None                   | None                 |                            | Winter roost sites extend along the coast from northern Mendocino to Baja California, Mexico.                            | Roosts located in wind-protected tree groves (eucalyptus, Monterey pine, cypress), with nectar and water sources nearby. |
| gold rush hanging scorpionfly                | None                   | None                 |                            | Known only from a small area on the western slopes of the central Sierra Nevada  | Darkly shaded crannies w/ high humidity, i.e. under tree roots, in overhanging banks, below rock outcrops, along streams |
| cheeseweed owlfly (cheeseweed moth lacewing) | None                   | None                 |                            | Inhabits the lower Colorado River drainage.  | Found under rocks or in flight over streams. <i>Larrea tridentata</i> is the suspected larval host.                      |
| San Francisco forktail damselfly             | None                   | None                 | IUCN-Vulnerable            | Endemic to the San Francisco Bay area.   | Small, marshy ponds and ditches with emergent and floating aquatic vegetation.   |
| desert monkey grasshopper                    | None                   | None                 | IUCN-Vulnerable            | Occurs in very arid environments in the vicinity of the San Bernardino Mtns.   | Known to occur on chamise ( <i>Adenostoma fasciculatum</i> ).  |
| Kelso giant sand treader cricket             | None                   | None                 | IUCN-Vulnerable            | Known only from the Kelso Dunes, San Bernardino County; 2500 ft elev.  | Found on bare, hard-packed sand ridges, 0.5 mile inland from margin.   |
| Coachella giant sand treader cricket         | None                   | None                 | IUCN-Vulnerable            | Known from the sand dune ridges in the vicinity of Coachella Valley.   | Population size regulated by amount of annual rainfall; some spots favor permanent habitation where springs dampen sand. |
| Kelso jerusalem cricket                      | None                   | None                 | IUCN-Vulnerable            | Inhabits a limited area of the Kelso Dunes (type locality), San Bernardino County.                                       | Found at the north base of a sand declivity, 15-25 ft high; assoc plants: sandpaper weed, croton, sand dune grass.       |
| Coachella Valley jerusalem cricket           | None                   | None                 | IUCN-Vulnerable            | Inhabits a small segment of the sand and dune areas of the Coachella Valley, in the vicinity of Palm Springs.            | Found in the large, undulating dunes piled up at the north base of Mt San Jacinto.                                       |
| Sierra pygmy grasshopper                     | None                   | None                 | IUCN-Vulnerable            | Known only from Madera and Mariposa counties.  |  |
| Middlekauff's shieldback katydid             | None                   | None                 | IUCN-Critically Endangered | Known only from Antioch Dunes.   |  |
| Lake Tahoe benthic stonefly                  | None                   | None                 |                            | Endemic to Lake Tahoe. Found at depths of 95-400 ft.   | Associated with deepwater plant communities of algae, mosses & liverworts.   |
| Shirrtail Creek stonefly                     | None                   | None                 |                            | Stenothermic and found in spring-like areas.   |  |
| Cosumnes spring stonefly                     | None                   | None                 |                            | Known only an intermittent tributary of the Cosumnes River in El Dorado County.  |  |
| Cold Spring caddisfly                        | None                   | None                 |                            | Only known from cold springs in the vicinity of Sagehen Creek.   |  |

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| Common name                         | Federal listing status | Calif listing status | Other Status    | General Habitat   | Micro Habitat   |
|-------------------------------------|------------------------|----------------------|-----------------|---|---|
| Sagehen Creek goeracean caddisfly   | None                   | None                 |                 | Found in relatively warm springs. Known from several sites in Nevada Co. & perhaps also from Mt. Tamalpais in Marin Co. |   |
| Kings Canyon cryptochian caddisfly  | None                   | None                 |                 | Narrowly distributed in cold springs in the Sierra Nevada.  | Restricted to spring stream and source.   |
| Denning's cryptic caddisfly         | None                   | None                 |                 | Larvae found in small, cool streams.  |   |
| confusion caddisfly                 | None                   | None                 |                 | Creeks.   |   |
| Kings Creek ecclysomyian caddisfly  | None                   | None                 |                 | Narrowly distributed in springs in the Sierra Nevada & Cascades.  |   |
| long-tailed caddisfly               | None                   | None                 |                 | Cold water streams fed by springs in the Sierra Nevada.   |   |
| Fort Dick limnephilus caddisfly     | None                   | None                 |                 | Known only from Fort Dick in Del Norte County.  |   |
| golden-horned caddisfly             | None                   | None                 |                 | Small streams in the Sierra.  | Larger population numbers downstream from the source and in more open areas.                                |
| Castle Crags rhyacophilan caddisfly | None                   | None                 |                 | Creeks.   |   |
| bilobed rhyacophilan caddisfly      | None                   | None                 |                 | Known only from Castle Crags State Park, Shasta County.   |   |
| spiny rhyacophilan caddisfly        | None                   | None                 |                 | Rhyacophilids generally prefer cool, running water.   |   |
| California diplectronan caddisfly   | None                   | None                 |                 |   |   |
| amphibious caddisfly                | None                   | None                 |                 | Mostly small first order streams in open, wet meadows. Also found in beaver ponds & second order streams.               | Final instar larvae leave the water at night to feed on riparian vegetation & return to water at sunrise.   |
| Edgewood blind harvestman           | None                   | None                 |                 | Open grassland in areas of serpentine bedrock.  | Found on the underside of moist serpentine rocks near permanent springs.                                    |
| Melones Cave harvestman             | None                   | None                 | IUCN-Vulnerable | Limestone caves in the vicinity of New Melones Reservoir on the Stanislaus River, Calaveras/Tuolumne counties.          | Cave temps range from 14-16 deg C; humidity, from 82-97%. Found under rocks or wandering on floor or walls. |
| Gaille's cave harvestman            | None                   | None                 |                 | Known only from the type locality, lime rock caves, El Dorado County.   | Species is troglobitic.   |
| Grubbs' cave harvestman             | None                   | None                 |                 | Known only from the type locality, Black Chasm Cave, Volcano, Amador County.  | Species is troglobitic.   |
| Martins' cave harvestman            | None                   | None                 |                 | Known only from the type locality, Heater Cave, 8 km north of Columbia.   | Species is troglobitic.   |
| Rudolph's cave harvestman           | None                   | None                 |                 | Known only from the type locality, Chrome Cave, Pardee Reservoir, Amador County.  | Species is troglobitic.   |
| Tuolumne cave harvestman            | None                   | None                 |                 | Known only from the type locality, Tuolumne Crystal Cave, Tuolumne, Tuolumne County.                                    | Species is troglobitic.   |

**Table J-1. List of Animal Species Considered in this SEIR**

| Common name                           | Federal listing status | Calif listing status | Other Status    | General Habitat  | Micro Habitat  |
|---------------------------------------|------------------------|----------------------|-----------------|--|--|
| King Tut Cave harvestman              | None                   | None                 |                 | Known only from the type locality, King Tut Cave, Calaveras County.  | Species is troglitic.  |
| Dolloff Cave spider                   | None                   | None                 | IUCN-Vulnerable | Known from caves in the Santa Cruz area.   | This species is an orb-weaver and occurs from the cave mouth into deep twilight. |
| Grubbs' Cave pseudoscorpion           | None                   | None                 |                 |  |  |
| Hom's micro-blind harvestman          | None                   | None                 |                 | Known only from Santa Clara County in xeric habitats.  | Known only from serpentine rocks in grassland habitats.                          |
| Moody's gnaphosid spider              | None                   | None                 |                 | Serpentine endemic.  |  |
| Arroyo Seco short-tailed whipscorpion | None                   | None                 |                 | Known only from the type locality, Arroyo Seco, Monterey County.   |  |
| Briggs' leptonetid spider             | None                   | None                 |                 | Known only from the type locality, Indian Valley Creek Cave, and nearby Butter Creek Cave, Trinity County.               | Troglobitic species.   |
| Ubick's leptonetid spider             | None                   | None                 |                 | Known only from the type locality, Arroyo Seco, Monterey County.   |  |
| Mendocino leptonetid spider           | None                   | None                 |                 | Known only from the type locality, Elk, and nearby sites in Mendocino County.  |  |
| Gertsch's socialchemmis spider        | None                   | None                 |                 | Known from only 2 localities in Los Angeles County: Brentwood (type locality) and Topanga Canyon.                        |  |
| Monterey socialchemmis spider         | None                   | None                 |                 | Known from only two localities in Monterey Co.: Los Padres NF; Arroyo Seco (type locality) and Cone Peak Trail.          |  |
| San Benito harvestman                 | None                   | None                 |                 | Known only from the type locality, Panoche Road, San Benito County.  | Found on serpentine rocks  |
| Stanislaus harvestman                 | None                   | None                 |                 | Known only from the type locality, 1.6 km south of Knight's Ferry, Stanislaus County.                                    | Found under basalt rocks in grassland.   |
| Crane Flat harvestman                 | None                   | None                 |                 | Known only from Crane Flat Junction, Tuolumne County. Known only from the holotype male and two female paratypes.        | Found under fallen bark in a mixed coniferous forest.                            |
| marbled harvestman                    | None                   | None                 |                 | Known only from the type locality, 14.5 km (9 miles) SE of Academy, Fresno Co. Known only from the type series.          | Serpentine endemic.  |
| Table Mountain harvestman             | None                   | None                 |                 | Known only from the type locality, Table Mountain, Fresno Co. Known only from the type series.                           |  |
| Piedra harvestman                     | None                   | None                 |                 | Known only from the type locality, 2.6 km SW of Piedra, Fresno County. Known only from the type series.                  | Found under unspecified type of rocks.   |
| Clough Cave harvestman                | None                   | None                 |                 | Known only from the type locality, Clough Cave.  |  |
| California floater                    | None                   | None                 | USFS-Sensitive  | Freshwater lakes and slow-moving streams and rivers. Taxonomy under review by specialists.                               | Generally in shallow water.  |
| western ridged mussel                 | None                   | None                 |                 | Primarily creeks & rivers & less often lakes. Originally in most of state, now extirpated from Central & Southern Calif. |  |

**Table J-1. List of Animal Species Considered in this SEIR**

| Common name                      | Federal listing status | Calif listing status | Other Status                  | General Habitat   | Micro Habitat   |
|----------------------------------|------------------------|----------------------|-------------------------------|---|---|
| western pearlshell               | None                   | None                 |                               | Aquatic.  | Prefers lower velocity waters.  |
| hooded lancetooth                | None                   | None                 | BLM-Sensitive                 | Occurs mostly in the Shasta-Trinity National forests in the northern half of Trinity County. Associated with limestone substrates, mostly in an elevation range of 1680-960 meters. | All known occurrences are near streams or in draws (intermittent stream channel). Needs permanent dampness. Late successional conditions provide suitable habitat conditions. |
| Trinity Spot                     | None                   | None                 |                               | Uncommon localized species with a disjunct range divided between the Klamath Mountains & Sierra Nevada.   | In moist leaf litter in forests, and in more areas, along streams or near seeps, springs, bogs & swamps.  |
| leaden slug                      | None                   | None                 |                               |   |   |
| Shasta chaparral                 | None                   | None                 | USFS-Sensitive                | Found within 100 meters of limestone outcroppings and talus slopes with some protective shade, or caves with shrubs or oak cover.   |   |
| Karok hesperian                  | None                   | None                 | IUCN-Data Deficient           | Occurs primarily under riparian vegetation (alders, maples), which provide shading from sunlight and a moist substrate.   | Inhabits leaf litter, wood debris, or soil & sand containing stones/pieces of wood; often found in large aggregations.  |
| Shasta hesperian                 | None                   | None                 | USFS-Sensitive                | Primarily found in the vicinity of Shasta Lake, up to 915 meters elevation.   | Moist bottom lands such as riparian areas, springs, seeps, marshes, and in the mouths of caves.   |
| Siskiyou hesperian               | None                   | None                 |                               | Found under logs in a swampy meadow in Siskiyou County (Roth, 1972).  |   |
| Marin hesperian                  | None                   | None                 |                               | Found in moist spots in coastal brushfield and chaparral vegetation in Marin County.  | Under leaves of cow-parship, around spring seeps, in leafmold along streams, in alder woods & mixed evergreen forest.   |
| Big Bar hesperian                | None                   | None                 | BLM-Sensitive; USFS-Sensitive | Only found in Trinity County, within the boundaries of Shasta-Trinity National Forest.  | Found in conifer or hardwood forests in permanently damp areas within 200 meters of stable streams, seeps, and springs.   |
| tight coin (=Yates' snail)       | None                   | None                 | IUCN-Vulnerable               | Inhabits limestone caves and outcroppings; favors north-facing slopes.  | Found in humus in limestone outcroppings.   |
| Natural Bridge megomphix         | None                   | None                 |                               | Forested areas.   | In moist leaf litter & under rotting logs on streambanks. Associated with perennial seeps and springs.  |
| Morongo (=Colorado) desertsnaill | None                   | None                 | IUCN-Near Threatened          | Known only from a gulch on the N side of Morongo Pass (type locality), San Bernardino County, near Riverside County line  | Found under rocks.  |
| Baker's desertsnaill             | None                   | None                 | IUCN-Data Deficient           | Inhabits N slope of a small range of limestone hills, 0.5 miles south of Baker, San Bernardino County.  | Found in rockslides.  |
| California Mccoy snail           | None                   | None                 | IUCN-Data Deficient           | Found in various sites in the McCoy Mtns and the Big Maria Mtns.  | Inhabits rockslides in gullies.   |
| Merced Canyon shoulderband       | None                   | None                 | IUCN-Vulnerable               | Merced River Canyon, 3-6 miles below El Portal; 150 ft elev.  | Inhabits rockslides   |
| Pomo bronze shoulderband         | None                   | None                 | IUCN-Data Deficient           | Found near the coast in heavily-timbered redwood canyons of Mendocino County.   | Found under redwoods.   |
| mountain shoulderband            | None                   | None                 |                               | Known only from the King Range in Humboldt County.  | Found in talus slopes.  |
| Kern shoulderband                | None                   | None                 | IUCN-Endangered               | Known only from Tulare and Kern counties, along the lower Kern River Canyon.  | Has been collected from dead vegetation along the water's edge.   |
| Oregon shoulderband              | None                   | None                 | BLM-Sensitive                 | Found on basaltic talus slopes; partial riparian associate.   | Found wherever permanent ground cover/moisture is available. Somewhat adapted to dry conditions during a portion of the year.   |

**Table J-1. List of Animal Species Considered in this SEIR**

| Common name                       | Federal listing status | Calif listing status | Other Status                        | General Habitat  | Micro Habitat   |
|-----------------------------------|------------------------|----------------------|-------------------------------------|--|---|
| Victorville shoulderband          | None                   | None                 | IUCN-Near Threatened                | Known only from along the Mojave River in San Bernardino County.   | Found among granite boulders and at the base of rocky cliffs.                             |
| Bridges' coast range shoulderband | None                   | None                 | IUCN-Data Deficient                 | Inhabits open hillsides of Alameda and Contra Costa counties.  | Tends to colonize under tall grasses and weeds.   |
| redwood shoulderband              | None                   | None                 | IUCN-Data Deficient                 | Known only from south slope of San Juan Grade, near Foot, 8 miles NW of Salinas.   |   |
| mesa shoulderband                 | None                   | None                 | IUCN-Vulnerable                     | Known only from a few locations in coastal San Diego County.   | Found in rock slides, beneath bark and rotten logs, and among coastal vegetation.         |
| Trinity shoulderband              | None                   | None                 | BLM-Sensitive                       | Limestone rockslides, litter in coniferous forests, old mine tailings, and along shaded streams in the Klamath Mountains   |   |
| westfork shoulderband             | None                   | None                 |                                     | Vicinity of the Mojave River.  | Under logs and leaves.  |
| Ten Mile shoulderband             | None                   | None                 |                                     | Found in coastal dunes, coastal scrub, and riparian redwood forest habitats.   |   |
| Warner Springs shoulderband       | None                   | None                 |                                     | Known only from two localities near Warner Springs, San Diego Co.  | Found in wood rat nests; as development eliminates rat nests, snail has become scarce.    |
| Klamath sideband                  | None                   | None                 |                                     | Lives mostly in limestone outcrops, caves, talus slides, and lava rockslides, but also occurs under forest debris in heavy shade on wooded hillsides.                    |   |
| keeled sideband                   | None                   | None                 | BLM-Sensitive; IUCN-Vulnerable      | Endemic to the Tuolumne River canyon, in association with steep limestone outcrops and talus slopes.   | Occurs in limestone where fractures or loose talus allow deep, sub-surface sheltering.    |
| A terrestrial snail               | None                   | None                 |                                     | Old growth and riparian associate; local endemic.  | Dead alder leaves and trunks near a stream, in relatively undisturbed forest.             |
| yellow-based sideband             | None                   | None                 |                                     | Old growth and riparian associate. Not collected since the early 1960s.  | Found on leaves, sticks, concrete wall of irrigation ditch and mossy boulders and stones. |
| Button's Sierra sideband          | None                   | None                 |                                     | Known from the central Sierra Nevada counties.   |   |
| hirsute Sierra sideband           | None                   | None                 | BLM-Sensitive                       | Known only from a few basaltic outcrops in Tuolumne County.  |   |
| Shasta sideband                   | None                   | None                 | IUCN-Data Deficient; USFS-Sensitive | Associated with limestone terrain in Shasta and Siskiyou counties. Associated with pine-oak woodlands.   |   |
| Tuolumne sideband                 | None                   | None                 | BLM-Sensitive                       | Endemic to the Tuolumne River canyon, in association with steep limestone outcrops and talus slopes.   | Occurs in limestone where fractures or loose talus allow deep, sub-surface sheltering.    |
| downy sideband                    | None                   | None                 |                                     | Old growth and riparian associate.   | Found among rocks and leaf litter along forested streambanks.                             |
| crested sideband                  | None                   | None                 |                                     | Old growth and riparian associate.   |   |
| Siskiyou shoulderband             | None                   | None                 | BLM-Sensitive                       | Lower reaches of major drainages. Found in talus and rock slides, under rocks and woody debris in moist conifer forests, caves, and riparian corridors in shrubby areas. | Rocks and woody debris serve as refugia during the summer.                                |
| canary duskysnail                 | None                   | None                 |                                     | Limnocrenes & hyporheic streams in the Pit River basin.  | Most abundant on the undersides of cobbles and boulders in shallow to moderate depths.    |

**Table J-1. List of Animal Species Considered in this SEIR**

| Common name                                     | Federal listing status | Calif listing status | Other Status        | General Habitat  | Micro Habitat   |
|---|------------------------|----------------------|---------------------|--|---|
| nugget pebblesnail                              | None                   | None                 | USFS-Sensitive      | Originally from near mouth of the Sacramento River upstream into the Pit River. Now extirpated from the Sacramento River |   |
| Archimedes pyrg                                 | None                   | None                 |                     | Springs and streams in the Pit and Klamath Basins.   | Snails typically found on mud substrate.  |
| Benton Valley (=Aahrdahl's) springsnail         | None                   | None                 |                     | Endemic to the type locality - a spring at Bramlette Ranch in Benton Valley, Mono County.                                | Common in dense watercress in uppermost portion of outflow of small, highly degraded spring.                            |
| Fish Slough springsnail                         | None                   | None                 |                     | Found in three of the four main springs in Fish Slough.  | Found only in small vestiges of rheocrene habitat at small orifices in NW springs & at start of outflow of NE springs.  |
| Wong's springsnail                              | None                   | None                 | USFS-Sensitive      | Owens Valley. Along east side from Pine Cr to Little Lake & along west side from French Spring to Marble Creek.          | Seeps and small-moderate size spring-fed streams. Common in watercress and/or on small bits of travertine & stone.      |
| Willow Creek pyrg                               | None                   | None                 |                     | Upper reaches of Willow Creek and an associated warm nasmode in the upper Pit River basin.                               | Snails found in warm (22 C) nasmode and in cooler Willow Creek. Snails more abundant in Willow Creek.                   |
| Ash Valley pyrg                                 | None                   | None                 |                     | Cold springs associated with upper Ash Creek, Ash Valley, upper Pit River basin.   | Helocrenes.   |
| Likely pyrg                                     | None                   | None                 |                     | Restricted to two closely adjacent springs along the south fork Pit River.   |   |
| Sucker Springs pyrg                             | None                   | None                 |                     | Endemic to a single site in the Pit River basin.   | Found in a large, cold spring outflow with slow to moderate current.  |
| Diablo Range pyrg                               | None                   | None                 |                     | Found in unnamed creek in Del Puerto Canyon.   | Stream is poorly shaded and slightly disturbed from pastoral and recreational activities.                               |
| Smoke Creek pyrg                                | None                   | None                 |                     | Springs & spring brooks within the Great Basin of northeastern California.   |   |
| Surprise Valley pyrg                            | None                   | None                 |                     | Found in springs in the Great Basin of northeastern California.  |   |
| San Luis Obispo pyrg                            | None                   | None                 |                     | Freshwater habitats in San Luis Obispo County.   |   |
| mimic tryonia (=California brackishwater snail) | None                   | None                 | IUCN-Data Deficient | Inhabits coastal lagoons, estuaries and salt marshes, from Sonoma County south to San Diego County.                      | Found only in permanently submerged areas in a variety of sediment types; able to withstand a wide range of salinities. |
| Grapevine Springs elongate tryonia              | None                   | None                 |                     |  |   |
| Grapevine Springs squat tryonia                 | None                   | None                 |                     | Endemic to springs in the Amargosa River basin   |   |
| robust walker                                   | None                   | None                 |                     | Freshwater.  |   |
| topaz juga                                      | None                   | None                 | USFS-Sensitive      | Cold, well-oxygenated, unpolluted water, generally with stable gravel substrate.   |   |
| scalloped juga                                  | None                   | None                 | USFS-Sensitive      |  |   |
| Chace juga                                      | None                   | None                 |                     | Small permanent streams at low to middle elevations in the Smith River drainage.   | Generally on gravel substrate, always in cold, clear, highly oxygenated, unpolluted, running water.                     |

**Table J-1. List of Animal Species Considered in this SEIR**

| Common name                | Federal listing status | Calif listing status | Other Status    | General Habitat   | Micro Habitat  |
|----------------------------|------------------------|----------------------|-----------------|---|--|
| redwood juga               | None                   | None                 |                 | High to low elevation coastal streams in northwestern California & southern Oregon.                               | Small spring-fed permanent rivulets to creeks, often on gravel, always in unpolluted, clear, cold, running water.        |
| kneecap lanx               | None                   | None                 |                 | Endemic to upper Sacramento River system. Breath entirely through mantle, & are very sensitive to polluted water. | Prefers fast, cold, well-oxygenated water and cobble-boulder substrate.  |
| Great Basin rams-horn      | None                   | None                 | USFS-Sensitive  | Larger lakes & slow rivers, including larger spring sources & spring-fed creeks.                                  | Snails burrow in soft mud.   |
| Badwater snail             | None                   | None                 | IUCN-Vulnerable | Restricted to saline spring sources in the Death Valley region, Inyo County.                                      | Occurs either under a salt-crust roof fringing the water's edge or on moistened vegetation; often found fully submerged. |
| pristine pyrg              | None                   | None                 |                 | Found in small springs.   |  |
| Yosemite Mariposa sideband | None                   | None                 |                 | Known only from Yosemite Valley along the Merced River, Mariposa County.  | Known to inhabit rockslides.   |

Table J-2a. Plant Species Considered in this EIR (Aquatic, Wetland and Riparian species)

| Scientific Name                                      | Common name                         | Federal listing status | Calif listing status | CNPS List | Other Status   | General Habitat  | Micro-Habitat   |
|--|-------------------------------------|------------------------|----------------------|-----------|----------------|--|---|
| <i>Orcuttia californica</i>                          | California Orcutt grass             | Endangered             | Endangered           | 1B.1      |                | Vernal pools.  | 15-660m.  |
| <i>Orcuttia pilosa</i>                               | hairy Orcutt grass                  | Endangered             | Endangered           | 1B.1      |                | Vernal pools.  | 25-125m.  |
| <i>Orcuttia viscida</i>                              | Sacramento Orcutt grass             | Endangered             | Endangered           | 1B.1      |                | Vernal pools.  | 30-100m.  |
| <i>Tuctoria mucronata</i>                            | Crampton's tuctoria or Solano grass | Endangered             | Endangered           | 1B.1      |                | Vernal pools, valley and foothill grassland.   | Clay bottoms of drying vernal pools and lakes in valley grassland. 5-10m.   |
| <i>Pogogyne nudiuscula</i>                           | Otay Mesa mint                      | Endangered             | Endangered           | 1B.1      |                | Vernal pools.  | Dry beds of vernal pools and moist swales w/ <i>Eryngium aristulatum</i> var <i>parishii</i> and <i>Orcuttia californica</i> . 85-250m. |
| <i>Pseudobahia bahiifolia</i>                        | Hartweg's golden sunburst           | Endangered             | Endangered           | 1B.1      |                | Valley and foothill grassland, cismontane woodland.  | Clay soils, predominantly on the northern slopes of knolls, but also along shady creeks or near vernal pools. 15-150m.                  |
| <i>Sidalcea oregana</i> ssp. <i>valida</i>           | Kenwood Marsh checkerbloom          | Endangered             | Endangered           | 1B.1      |                | Marshes and swamps.  | Edges of freshwater marshes. 115-150m.  |
| <i>Nitrophila mohavensis</i>                         | Amargosa nitrophila                 | Endangered             | Endangered           | 1B.1      |                | Alkali playa, meadows and seeps.   | Heavy alkaline mudflats, and saltgrass meadows. 425-750m.   |
| <i>Poa napensis</i>                                  | Napa blue grass                     | Endangered             | Endangered           | 1B.1      |                | Meadows and seeps, valley and foothill grassland.  | Moist alkaline meadows fed by runoff from nearby hot springs. 100-125m.   |
| <i>Lasthenia burkei</i>                              | Burke's goldfields                  | Endangered             | Endangered           | 1B.1      |                | Vernal pools, meadows and seeps.   | Most often in vernal pools and swales. 15-580m.   |
| <i>Eryngium aristulatum</i> var. <i>parishii</i>     | San Diego button-celery             | Endangered             | Endangered           | 1B.1      |                | Vernal pools, coastal scrub, valley and foothill grassland.  | San Diego mesa hardpan & claypan vernal pools & southern interior basalt flow vernal pools; usu surr by scrub. 15-620m.                 |
| <i>Limnanthes vinculans</i>                          | Sebastopol meadowfoam               | Endangered             | Endangered           | 1B.1      |                | Mesic meadows, vernal pools, valley and foothill grassland.  | Swales, wet meadows and marshy areas in valley oak savanna; on poorly drained soils of clays and sandy loam. 15-115m.                   |
| <i>Blennosperma bakeri</i>                           | Sonoma sunshine                     | Endangered             | Endangered           | 1B.1      |                | Vernal pools, valley and foothill grassland.   | Vernal pools and swales. 10-100m.   |
| <i>Pogogyne abramsii</i>                             | San Diego mesa mint                 | Endangered             | Endangered           | 1B.1      |                | Vernal pools.  | Vernal pools within grasslands, chamise chaparral or coastal sage scrub communities; w/other rare plants. 90-200m.                      |
| <i>Eryngium constancei</i>                           | Loch Lomond button-celery           | Endangered             | Endangered           | 1B.1      |                | Vernal pools.  | Volcanic ash flow vernal pools. 625-855m.   |
| <i>Carex albida</i>                                  | white sedge                         | Endangered             | Endangered           | 1B.1      |                | Freshwater marsh, bogs and fens, meadows and seeps.  | Wet meadows and marshes. 35-55m.  |
| <i>Arenaria paludicola</i>                           | marsh sandwort                      | Endangered             | Endangered           | 1B.1      | USFS-Sensitive | Marshes and swamps.  | Growing up through dense mats of <i>Typha</i> , <i>Juncus</i> , <i>Scirpus</i> , etc. in freshwater marsh. 10-170m.                     |
| <i>Thelypodium stenopetalum</i>                      | slender-petaled thelypodium         | Endangered             | Endangered           | 1B.1      | USFS-Sensitive | Meadows and seeps, pebble plains.  | Seasonally moist alkaline clay soils; associated with seeps and springs in the pebble plains. 1900-2245m.                               |
| <i>Sidalcea pedata</i>                               | bird-foot checkerbloom              | Endangered             | Endangered           | 1B.1      | USFS-Sensitive | Meadows and seeps, pebble plains.  | Vernally mesic sites in meadows or pebble plains. 1600-2500m.   |
| <i>Limnanthes floccosa</i> ssp. <i>californica</i>   | Butte County meadowfoam             | Endangered             | Endangered           | 1B.1      | USFS-Sensitive | Vernal pools, valley and foothill grassland.   | Wet or flowing drainages & depressions; often not in discrete vernal pools; soils are usu Redding clay w/rocks. 50-930m.                |
| <i>Navarretia leucocephala</i> ssp. <i>plieantha</i> | many-flowered navarretia            | Endangered             | Endangered           | 1B.2      |                | Vernal pools.  | Volcanic ash flow vernal pools. 30-950m.  |
| <i>Potentilla hickmanii</i>                          | Hickman's cinquefoil                | Endangered             | Endangered           | 1B.1      |                | Coastal bluff scrub, closed-cone coniferous forest, meadows and seeps, marshes and swamps.                               | Freshwater marshes, seeps, and small streams in open or forested areas along the coast. 5-125m.   |
| <i>Lilium pardalinum</i> ssp. <i>pitkinense</i>      | Pitkin Marsh lily                   | Endangered             | Endangered           | 1B.1      |                | Cismontane woodland, meadows and seeps, freshwater marsh.  | Saturated, sandy soils w/ grasses and shrubs. 35-65m.   |
| <i>Lilium occidentale</i>                            | western lily                        | Endangered             | Endangered           | 1B.1      |                | Coastal scrub, freshwater marsh, bogs and fens, coastal bluff scrub, coastal prairie, No. Coast coniferous forest.       | Well-drained, old beach washes overlain w/wind-blown alluvium & org. topsoil; usu near margins of Sitka spruce. 2-185m.                 |
| <i>Sedella leiocarpa</i>                             | Lake County stonecrop               | Endangered             | Endangered           | 1B.1      |                | Valley and foothill grassland, vernal pools, cismontane woodland.  | Level areas that are seasonally wet and dry out in late spring; substrate usually of volcanic origin. 365-790m.                         |
| <i>Alopecurus aequalis</i> var. <i>sonomensis</i>    | Sonoma alopecurus                   | Endangered             | None                 | 1B.1      |                | Freshwater marshes and swamps, riparian scrub.   | Wet areas, marshes, and riparian banks with other wetland species. 5-360m.  |
| <i>Atriplex coronata</i> var. <i>notator</i>         | San Jacinto Valley crownscale       | Endangered             | None                 | 1B.1      |                | Playas, chenopod scrub, valley and foothill grassland, vernal pools.   | Dry, alkaline flats in the San Jacinto River Valley. 400-500m.  |
| <i>Lasthenia conjugens</i>                           | Contra Costa goldfields             | Endangered             | None                 | 1B.1      |                | Valley and foothill grassland, vernal pools, cismontane woodland. Extirpated from most of its range; extrem. endangered. | Vernal pools, swales, low depressions, in open grassy areas. 1-445m.  |

Table J-2a. Plant Species Considered in this EIR (Aquatic, Wetland and Riparian species)

| Scientific Name  | Common name                     | Federal listing status | Calif listing status | CNPS List | Other Status                  | General Habitat  | Micro-Habitat   |
|--|---------------------------------|------------------------|----------------------|-----------|-------------------------------|--|---|
| <i>Taraxacum californicum</i>                          | California dandelion            | Endangered             | None                 | 1B.1      | USFS-Sensitive                | Meadows and seeps.   | Mesic meadows, usually free of taller vegetation. 1620-2800m.   |
| <i>Poa atropurpurea</i>                                | San Bernardino blue grass       | Endangered             | None                 | 1B.2      | USFS-Sensitive                | Meadows and seeps.   | Mesic meadows of open pine forests and grassy slopes, loamy alluvial to sandy loam soil. 1350-2455m.                            |
| <i>Tuctoria greenei</i>                                | Greene's tuctoria               | Endangered             | Rare                 | 1B.1      | USFS-Sensitive                | Vernal pools, valley and foothill grassland.   | Dry bottoms of vernal pools in open grasslands. 30-1065m.   |
| <i>Navarretia leucocephala</i> ssp. <i>pauciflora</i>  | few-flowered navarretia         | Endangered             | Threatened           | 1B.1      |                               | Vernal pools.  | Volcanic ash flow, and volc substrate vernal pools. 400-855m.   |
| <i>Nasturtium gambelii</i>                             | Gambel's water cress            | Endangered             | Threatened           | 1B.1      | USFS-Sensitive                | Marshes and swamps.  | Freshwater and brackish marshes at the margins of lakes and along streams, in or just above the water level. 5-1305m.           |
| <i>Cirsium loncholepis</i>                             | La Graciosa thistle             | Endangered             | Threatened           | 1B.1      | USFS-Sensitive                | Coastal dunes, brackish marshes, riparian scrub.   | Lake edges, riverbanks, other wetlands; often in dune areas. 5-185m.  |
| <i>Plagiobothrys strictus</i>                          | Calistoga popcorn-flower        | Endangered             | Threatened           | 1B.1      |                               | Broadleaved upland forest, meadows and seeps, valley and foothill grassland, vernal pools. | Alkaline sites near thermal springs and on margins of vernal pools in heavy, dark, adobe-like clay. 90-160m.                    |
| <i>Brodiaea filifolia</i>                              | thread-leaved brodiaea          | Threatened             | Endangered           | 1B.1      | USFS-Sensitive                | Cismontane woodland, coastal scrub, playas, valley and foothill grassland, vernal pools.   | Usually associated with annual grassland and vernal pools; often surr by shrubland habitats. Clay soils. 25-860m.               |
| <i>Orcuttia inaequalis</i>                             | San Joaquin Valley Orcutt grass | Threatened             | Endangered           | 1B.1      |                               | Vernal pools.  | 30-755m.  |
| <i>Neostaphia colusana</i>                             | Colusa grass                    | Threatened             | Endangered           | 1B.1      |                               | Vernal pools.  | Usually in large, or deep vernal pool bottoms; adobe soils. 5-110m.   |
| <i>Orcuttia tenuis</i>                                 | slender Orcutt grass            | Threatened             | Endangered           | 1B.1      | USFS-Sensitive                | Vernal pools.  | 30-1735m.   |
| <i>Castilleja campestris</i> ssp. <i>succulenta</i>    | succulent owl's-clover          | Threatened             | Endangered           | 1B.2      |                               | Vernal pools, valley and foothill grassland.   | Moist places, often in acidic soils. 25-750m.   |
| <i>Rorippa subumbellata</i>                            | Tahoe yellow cress              | Candidate              | Endangered           | 1B.1      | USFS-Sensitive                | Lower montane coniferous forest, meadows and seeps.  | Sandy beaches, on lakeside margins and in riparian communities; on decomposed granite sand. 1885-1900(2395)m.                   |
| <i>Downingia concolor</i> var. <i>brevior</i>          | Cuyamaca Lake downingia         | None                   | Endangered           | 1B.1      |                               | Meadows (mesic), vernal pools.   | In vernal seeps, lakes and pools, and on mudflats, with <i>Orthocarpus</i> , <i>Limnanthes</i> , <i>Collinsia</i> . 1400-1500m. |
| <i>Eryngium racemosum</i>                              | Delta button-celery             | None                   | Endangered           | 1B.1      |                               | Riparian scrub.  | Seasonally inundated floodplain on clay. 3-75m.   |
| <i>Sidalcea stipularis</i>                             | Scadden Flat checkerbloom       | None                   | Endangered           | 1B.1      |                               | Marshes and swamps.  | Wet montane marshes fed by springs. 700-740m.   |
| <i>Sidalcea covillei</i>                               | Owens Valley checkerbloom       | None                   | Endangered           | 1B.1      | BLM-Sensitive                 | Meadows and seeps, Great Basin scrub.  | Moist alkaline meadows & freshwater seeps, fine sandy loam soil, one occurrence in stoney calcareous soil. 1090-1415m.          |
| <i>Dichanthelium lanuginosum</i> var. <i>thermale</i>  | Geysers dichanthelium           | None                   | Endangered           | 1B.1      | BLM-Sensitive                 | Closed-cone coniferous forest, riparian forest, valley and foothill grassland.             | Usually around moist, warm soil in the vicinity of hot springs. 445-815m.   |
| <i>Pogogyne clareana</i>                               | Santa Lucia mint                | None                   | Endangered           | 1B.2      |                               | Riparian woodland.   | Tributaries of the Nacimiento River, in moist sandy soil. 300-490m.   |
| <i>Limnanthes douglasii</i> ssp. <i>sulphurea</i>      | Point Reyes meadowfoam          | None                   | Endangered           | 1B.2      |                               | Fresh. marsh, vernal pools, coastal prairie, meadows & seeps, cismontane woodland.         | Vernally wet depressions in open rolling, coastal prairies & meadows; typically in dark clay soil. 10-120m.                     |
| <i>Gratiola heterosepala</i>                           | Boggs Lake hedge-hyssop         | None                   | Endangered           | 1B.2      | BLM-Sensitive                 | Marshes and swamps (freshwater), vernal pools.   | Clay soils; usually in vernal pools, sometimes on lake margins. 5-2400m.  |
| <i>Limnanthes gracilis</i> ssp. <i>parishii</i>        | Parish's meadowfoam             | None                   | Endangered           | 1B.2      | BLM-Sensitive; USFS-Sensitive | Meadows and seeps, vernal pools.   | Vernally moist areas and temporary seeps of highland meadows and plateaus; often bordering lakes and streams. 600-1760m.        |
| <i>Deinandra mohavensis</i>                            | Mojave tarplant                 | None                   | Endangered           | 1B.3      | BLM-Sensitive; USFS-Sensitive | Riparian scrub, chaparral.   | Low sand bars in river bed; mostly in riparian areas or in ephemeral grassy areas. 850-1600m.                                   |
| <i>Navarretia fossalis</i>                             | spreading navarretia            | Threatened             | None                 | 1B.1      |                               | Vernal pools, chenopod scrub, marshes and swamps, playas.                                  | San Diego hardpan & San Diego claypan vernal pools; in swales & V.P's, often surr. by other habitat types. 30-1300m.            |
| <i>Astragalus lentiginosus</i> var. <i>piscinensis</i> | Fish Slough milk-vetch          | Threatened             | None                 | 1B.1      |                               | Meadows, playas.   | Usually found on mounds in alkali meadows with sparse vegetative cover. 1120-1300m.   |
| <i>Grindelia fraxinipratensis</i>                      | Ash Meadows gumplant            | Threatened             | None                 | 1B.2      |                               | Meadows, chenopod scrub.   | Saline clay soil, esp in depressions and in saturated soils next to standing water. 630-700m.                                   |

Table J-2a. Plant Species Considered in this EIR (Aquatic, Wetland and Riparian species)

| Scientific Name                              | Common name                      | Federal listing status | Calif listing status | CNPS List | Other Status                  | General Habitat   | Micro-Habitat  |
|--|----------------------------------|------------------------|----------------------|-----------|-------------------------------|---|--|
| <i>Chamaesyce hooveri</i>                    | Hoover's spurge                  | Threatened             | None                 | 1B.2      |                               | Vernal pools, valley and foothill grassland.  | Vernal pools on volcanic mudflow or clay substrate. 25-130m.   |
| <i>Howellia aquatilis</i>                    | water howellia                   | Threatened             | None                 | 2.2       | USFS-Sensitive                | Freshwater marshes and swamps, lower montane coniferous forest.                           | In clear ponds with other aquatics and surrounded by ponderosa pine forest and sometimes riparian associates. 3-1375m                                |
| <i>Pleuropogon hooverianus</i>               | North Coast semaphore grass      | None                   | Threatened           | 1B.1      | BLM-Sensitive                 | Broadleaved upland forest, meadows and seeps, North Coast coniferous forest.              | Wet grassy, usually shady areas, sometimes freshwater marsh; associated with forest environments; 10-1150m.  |
| <i>Abronia alpina</i>                        | Ramshaw Meadows abronia          | Candidate              | None                 | 1B.1      | USFS-Sensitive                | Meadows and seeps.  | Gravelly margins of meadows; in gravel and sand with Hulsea and Lupinus. 2400-2700m. [Occurs only in Ramshaw and Templeton meadows of Tulare County] |
| <i>Potentilla basaltica</i>                  | Black Rock potentilla            | Candidate              | None                 | 1B.3      | BLM-Sensitive                 | Meadows and seeps.  | Alkaline, sandy, volcanic soils. 1530-1555m.   |
| <i>Lilaeopsis masonii</i>                    | Mason's lilaeopsis               | None                   | Rare                 | 1B.1      |                               | Freshwater and brackish marshes, riparian scrub.  | Tidal zones, in muddy or silty soil formed through river deposition or river bank erosion. 0-10m.  |
| <i>Limnanthes bakeri</i>                     | Baker's meadowfoam               | None                   | Rare                 | 1B.1      | BLM-Sensitive                 | Freshwater marsh, valley and foothill grassland, meadows and seeps, vernal pools.         | Seasonally moist or saturated sites w/in grassland; also in swales, roadside ditches & margins of marshy areas. 175-910m                             |
| <i>Sanicula maritima</i>                     | adobe sanicle                    | None                   | Rare                 | 1B.1      | USFS-Sensitive                | Meadows and seeps, valley and foothill grassland, chaparral, coastal prairie.             | Moist clay or ultramafic soils. 30-240m.   |
| <i>Bensoniella oregona</i>                   | bensoniella                      | None                   | Rare                 | 1B.1      | USFS-Sensitive                | Bogs and fens, lower montane coniferous forest, meadows.                                  | Wet meadows and openings in forest. 935-1400m.   |
| <i>Delphinium hesperium ssp. cuyamaca</i>    | Cuyamaca larkspur                | None                   | Rare                 | 1B.2      | BLM-Sensitive; USFS-Sensitive | Lower montane coniferous forest, meadows.   | On dried edge of grassy meadows, also described as in mesic sites. 1210-1630m.   |
| <i>Lupinus padre-crowleyi</i>                | Father Crowley's lupine          | None                   | Rare                 | 1B.2      | USFS-Sensitive                | Great Basin scrub, riparian scrub, riparian forest, upper montane coniferous forest.      | Scattered on steep avalanche chutes, in sunny sites in drainages, & in valley bottoms; decomposed granite. 2500-4000m.                               |
| <i>Eryngium aristulatum var. hooveri</i>     | Hoover's button-celery           | None                   | None                 | 1B.1      |                               | Vernal pools.   | Alkaline depressions, vernal pools, roadside ditches and other wet places near the coast. 5-45m.   |
| <i>Navarretia myersii ssp. myersii</i>       | pincushion navarretia            | None                   | None                 | 1B.1      |                               | Vernal pools, valley and foothill grassland.  | Clay soils within nonnative grassland. 20-330m.  |
| <i>Juglans hindsii</i>                       | Northern California black walnut | None                   | None                 | 1B.1      |                               | Riparian forest, riparian woodland. Few extant native stands remain; widely naturalized.  | Deep alluvial soil associated with a creek or stream. 0-395m.  |
| <i>Centromadia parryi ssp. australis</i>     | southern tarplant                | None                   | None                 | 1B.1      |                               | Marshes and swamps (margins), valley and foothill grassland.                              | Often in disturbed sites near the coast at marsh edges; also in alkaline soils sometimes with saltgrass. Sometimes on vernal pool margins. 0-425m.   |
| <i>Plagiobothrys hystriculus</i>             | bearded popcorn-flower           | None                   | None                 | 1B.1      |                               | Vernal pools, valley and foothill grassland.  | Wet sites. 10-50m.   |
| <i>Geothallus tuberosus</i>                  | Campbell's liverwort             | None                   | None                 | 1B.1      |                               | Coastal scrub, vernal pools, most suitable habitat lost to urbanization.                  | Liverwort known from mesic soil. 10-600m.  |
| <i>Centromadia pungens ssp. laevis</i>       | smooth tarplant                  | None                   | None                 | 1B.1      |                               | Valley and foothill grassland, chenopod scrub, meadows, playas, riparian woodland.        | Alkali meadow, alkali scrub; also in disturbed places. 0-480m.   |
| <i>Navarretia prostrata</i>                  | prostrate vernal pool navarretia | None                   | None                 | 1B.1      |                               | Coastal scrub, valley and foothill grassland, vernal pools.                               | Alkaline soils in grassland, or in vernal pools. Mesic, alkaline sites. 15-700m.   |
| <i>Juncus digitatus</i>                      | finger rush                      | None                   | None                 | 1B.1      |                               | Cismontane woodland (openings), lower montane coniferous forest (openings), vernal pools. | In full sun, in the vernally damp ground of seeps, vernal pools and swales on gentle slopes over volcanic bedrock. 600-800m.                         |
| <i>Fritillaria lanceolata var. tristulis</i> | Marin checker lily               | None                   | None                 | 1B.1      |                               | Coastal bluff scrub, coastal scrub, coastal prairie.                                      | Occurrences reported from canyons and riparian areas as well as rock outcrops; often on serpentine. 30-300m.   |
| <i>Orthocarpus pachystachyus</i>             | Shasta orthocarpus               | None                   | None                 | 1B.1      | BLM-Sensitive                 | Great Basin scrub, meadows and seeps (?), valley and foothill grassland.                  | Alluvial plains, hillsides. 830-995m.  |
| <i>Rhynchospora californica</i>              | California beaked-rush           | None                   | None                 | 1B.1      | BLM-Sensitive                 | Bogs and fens, marshes and swamps, lower montane coniferous forest, meadows and seeps.    | Freshwater seeps and open marshy areas. 45-1000m.  |
| <i>Legenere limosa</i>                       | legenere                         | None                   | None                 | 1B.1      | BLM-Sensitive                 | Vernal pools. Many historical occurrences are extirpated.                                 | In beds of vernal pools. 1-880m.   |
| <i>Astragalus hornii var. hornii</i>         | Horn's milk-vetch                | None                   | None                 | 1B.1      | BLM-Sensitive                 | Meadows and seeps, playas.  | Lake margins, alkaline sites. 60-850m.   |
| <i>Puccinellia howellii</i>                  | Howell's alkali grass            | None                   | None                 | 1B.1      | BLM-Sensitive                 | Meadows and seeps.  | Mineralized soils around mineral springs and seeps. One site known: 485m.  |
| <i>Cirsium crassicaule</i>                   | slough thistle                   | None                   | None                 | 1B.1      | BLM-Sensitive                 | Chenopod scrub, marshes and swamps, riparian scrub.                                       | Sloughs, riverbanks, and marshy areas. 3-100m.   |
| <i>Paronychia ahartii</i>                    | Ahart's paronychia               | None                   | None                 | 1B.1      | BLM-Sensitive                 | Valley and foothill grassland, vernal pools, cismontane woodland.                         | Stony, nearly barren clay of swales and higher ground around vernal pools. 30-510m.  |
| <i>Cordylanthus mollis ssp. hispidus</i>     | hispid bird's-beak               | None                   | None                 | 1B.1      | BLM-Sensitive                 | Meadows, playas, valley and foothill grassland.   | In damp alkaline soils, especially in alkaline meadows and alkali sinks with Distichlis. 10-155m.  |

Table J-2a. Plant Species Considered in this EIR (Aquatic, Wetland and Riparian species)

| Scientific Name  | Common name                 | Federal listing status | Calif listing status | CNPS List | Other Status                  | General Habitat   | Micro-Habitat   |
|--|-----------------------------|------------------------|----------------------|-----------|-------------------------------|---|---|
| <i>Lasthenia glabrata</i> ssp. <i>coulteri</i>         | Coulter's goldfields        | None                   | None                 | 1B.1      | BLM-Sensitive                 | Coastal salt marshes, playas, valley and foothill grassland, vernal pools.  | Usually found on alkaline soils in playas, sinks, and grasslands. 1-1400m.  |
| <i>Navarretia leucocephala</i> ssp. <i>bakeri</i>      | Baker's navarretia          | None                   | None                 | 1B.1      | BLM-Sensitive                 | Cismontane woodland, meadows and seeps, vernal pools, valley and foothill grassland, lower montane coniferous forest. | Vernal pools and swales; adobe or alkaline soils. 5-950m.   |
| <i>Polygonum polygaloides</i> ssp. <i>esotericum</i>   | Modoc County knotweed       | None                   | None                 | 1B.1      | BLM-Sensitive; USFS-Sensitive | Great Basin scrub, vernal pools, lower montane coniferous forest, meadows and seeps.                                  | Edges of seasonal lakes and ponds with <i>Deschampsia</i> , <i>Navarretia</i> , etc. 1480-1690m.  |
| <i>Brodiaea orcuttii</i>                               | Orcutt's brodiaea           | None                   | None                 | 1B.1      | BLM-Sensitive; USFS-Sensitive | Vernal pools, valley and foothill grassland, closed-cone coniferous forest, cismontane woodland, chaparral, meadows.  | Mesic, clay habitats; sometimes serpentine; usu in vernal pools and small drainages. 30-1615m.  |
| <i>Ivesia aperta</i> var. <i>canina</i>                | Dog Valley ivesia           | None                   | None                 | 1B.1      | USFS-Sensitive                | Lower montane coniferous forest, meadows.   | Shallow rocky soil of volcanic origin. 1600-2000m.  |
| <i>Atriplex parishii</i>                               | Parish's brittlescale       | None                   | None                 | 1B.1      | USFS-Sensitive                | Alkali meadows, vernal pools, chenopod scrub, playas.   | Usually on drying alkali flats with fine soils. 4-140m.   |
| <i>Plagiobothrys torreyi</i> var. <i>torreyi</i>       | Yosemite popcorn-flower     | None                   | None                 | 1B.2      |                               | Lower montane coniferous forest, meadows and seeps.   | 1200-1370m.   |
| <i>Deinandra baccigalupii</i>                          | Livermore tarplant          | None                   | None                 | 1B.2      |                               | Meadows and seeps.  | Alkaline meadows. 150-185m.   |
| <i>Atriplex persistens</i>                             | vernal pool smallscale      | None                   | None                 | 1B.2      |                               | Vernal pools.   | Alkaline vernal pools. 10-115m.   |
| <i>Sidalcea calycosa</i> ssp. <i>rhizomata</i>         | Point Reyes checkerbloom    | None                   | None                 | 1B.2      |                               | Marshes and swamps.   | Freshwater marshes near the coast. 5-75(245)m.  |
| <i>Astragalus tener</i> var. <i>tener</i>              | alkali milk-vetch           | None                   | None                 | 1B.2      |                               | Alkali playa, valley and foothill grassland, vernal pools.  | Low ground, alkali flats, and flooded lands; in annual grassland or in playas or vernal pools. 1-170m.  |
| <i>Platanthera yosemitensis</i>                        | Yosemite bog orchid         | None                   | None                 | 1B.2      |                               | Meadows and seeps.  | Mesic areas. Granite substrates. 2100-2285m.  |
| <i>Trifolium depauperatum</i> var. <i>hydrophilum</i>  | saline clover               | None                   | None                 | 1B.2      |                               | Marshes and swamps, valley and foothill grassland, vernal pools.  | Mesic, alkaline sites. 0-300m.  |
| <i>Symphotrichum lentum</i>                            | Suisun Marsh aster          | None                   | None                 | 1B.2      |                               | Marshes and swamps (brackish and freshwater).   | Most often seen along sloughs with <i>Phragmites</i> , <i>Scirpus</i> , <i>blackberry</i> , <i>Typha</i> , etc. 0-3m.                                 |
| <i>Lathyrus jepsonii</i> var. <i>jepsonii</i>          | Delta tule pea              | None                   | None                 | 1B.2      |                               | Freshwater and brackish marshes.  | Often found w/ <i>Typha</i> , <i>Aster lentus</i> , <i>Rosa calif.</i> , <i>Juncus</i> spp., <i>Scirpus</i> , etc. Usually on marsh and slough edges. |
| <i>Juncus leiospermus</i> var. <i>ahartii</i>          | Ahart's dwarf rush          | None                   | None                 | 1B.2      |                               | Vernal pools.   | Restricted to the edges of vernal pools. 30-100m.   |
| <i>Eryngium spinosepalum</i>                           | spiny-sepaled button-celery | None                   | None                 | 1B.2      |                               | Vernal pools, valley and foothill grassland.  | Some sites on clay soil of granitic origin; vernal pools, within grassland. 100-420m.   |
| <i>Cinna bolanderi</i>                                 | Bolander's woodreed         | None                   | None                 | 1B.2      |                               | Meadows and seeps, upper montane coniferous forest.   | Streamsides and other mesic areas. 1670-2440m.  |
| <i>Juncus luciensis</i>                                | Santa Lucia dwarf rush      | None                   | None                 | 1B.2      |                               | Vernal pools, meadows, lower montane coniferous forest, chaparral, Great Basin scrub.                                 | Vernal pools, ephemeral drainages, wet meadow habitats and streamside. 300-2040m.   |
| <i>Eryngium pinnatisectum</i>                          | Tuolumne button-celery      | None                   | None                 | 1B.2      |                               | Vernal pools, cismontane woodland, lower montane coniferous forest.   | Volcanic soils; vernal pools and mesic sites within other natural communities. 250-450m.  |
| <i>Sidalcea oregana</i> ssp. <i>hydrophila</i>         | marsh checkerbloom          | None                   | None                 | 1B.2      |                               | Meadows and seeps, riparian forest.   | Wet soil of streambanks, meadows. 545-2300m.  |
| <i>Lepidium latipes</i> var. <i>heckardii</i>          | Heckard's pepper-grass      | None                   | None                 | 1B.2      |                               | Valley and foothill grassland, vernal pools.  | Grassland, and sometimes vernal pool edges. Alkaline soils. 3-30m.  |
| <i>Atriplex joaquiniana</i>                            | San Joaquin spearscale      | None                   | None                 | 1B.2      |                               | Chenopod scrub, alkali meadow, valley and foothill grassland.   | In seasonal alkali wetlands or alkali sink scrub with <i>Distichlis spicata</i> , <i>Frankenia</i> , etc. 1-250m.                                     |
| <i>Atriplex depressa</i>                               | brittlescale                | None                   | None                 | 1B.2      |                               | Chenopod scrub, meadows, playas, valley and foothill grassland, vernal pools.   | Usually in alkali scalds or alk. clay in meadows or annual grassland; rarely assoc w/riparian, marshes, or V.P.'s. 1-320m.                            |
| <i>Malacothamnus davidsonii</i>                        | Davidson's bush-mallow      | None                   | None                 | 1B.2      |                               | Coastal scrub, riparian woodland, chaparral.  | Sandy washes. 180-855m.   |
| <i>Cryptantha crinita</i>                              | silky cryptantha            | None                   | None                 | 1B.2      | BLM-Sensitive; USFS-Sensitive | Cismontane woodland, valley foothill grassland, lower montane coniferous forest, riparian forest, riparian woodland.  | In gravelly stream beds. 85-220m.   |
| <i>Scutellaria bolanderi</i> ssp. <i>austromontana</i> | southern mountains skullcap | None                   | None                 | 1B.2      | USFS-Sensitive                | Chaparral, cismontane woodland, lower montane coniferous forest.  | In gravelly soils on streambanks or in mesic sites in oak or pine woodland. 425-2000m.  |
| <i>Campanula californica</i>                           | swamp harebell              | None                   | None                 | 1B.2      | BLM-Sensitive                 | Bogs and fens, closed-cone coniferous forest, coastal prairie, meadows, freshwater marsh, N Coast coniferous forest.  | Bogs and marshes in a variety of habitats; uncommon where it occurs. 1-405m.  |
| <i>Sagittaria sanfordii</i>                            | Sanford's arrowhead         | None                   | None                 | 1B.2      | BLM-Sensitive                 | Marshes and swamps.   | In standing or slow-moving freshwater ponds, marshes, and ditches. 0-610m.  |

**Table J-2a. Plant Species Considered in this EIR (Aquatic, Wetland and Riparian species)**

| Scientific Name  | Common name                           | Federal listing status | Calif listing status | CNPS List | Other Status                  | General Habitat  | Micro-Habitat   |
|--|---------------------------------------|------------------------|----------------------|-----------|-------------------------------|--|---|
| <i>Sidalcea oregana</i> ssp. <i>eximia</i>                 | coast sidalcea                        | None                   | None                 | 1B.2      | BLM-Sensitive                 | Meadows and seeps, North Coast coniferous forest, lower montane coniferous forest.                                     | Nears meadows, in gravelly soil. 0-1800m.   |
| <i>Cordylanthus tecopensis</i>                             | Tecopa bird's-beak                    | None                   | None                 | 1B.2      | BLM-Sensitive                 | Meadows (alkaline), chenopod scrub, Mojavean desert scrub.   | Restricted to moist alkaline soils. 60-625m.  |
| <i>Carex klamathensis</i>                                  | Klamath sedge                         | None                   | None                 | 1B.2      | BLM-Sensitive                 | Meadows and seeps, chaparral, cismontane woodland.   | Serpentine. 1000-1140m.   |
| <i>Atriplex vallicola</i>                                  | Lost Hills crowscale                  | None                   | None                 | 1B.2      | BLM-Sensitive                 | Chenopod scrub, valley and foothill grassland, vernal pools.   | In powdery, alkaline soils that are vernal moist with <i>Frankenia</i> , <i>Atriplex</i> spp. and <i>Distichlis</i> . 0-605m. |
| <i>Centromadia parryi</i> ssp. <i>parryi</i>               | pappose tarplant                      | None                   | None                 | 1B.2      | BLM-Sensitive                 | Coastal prairie, meadows and seeps, coastal salt marsh, valley and foothill grassland.                                 | Vernally mesic, often alkaline sites. 2-420m.   |
| <i>Polycenium williamsiae</i>                              | Williams' combleaf                    | None                   | None                 | 1B.2      | BLM-Sensitive; USFS-Sensitive | Alkali marshes, playas, vernal pools.  | 1350-2700m.   |
| <i>Pyrocoma lucida</i>                                     | sticky pyrocoma                       | None                   | None                 | 1B.2      | BLM-Sensitive; USFS-Sensitive | Lower montane coniferous forest, meadows and seeps.  | Alkaline flats, clay soils. 700-1880m.  |
| <i>Phacelia inyoensis</i>                                  | Inyo phacelia                         | None                   | None                 | 1B.2      | BLM-Sensitive; USFS-Sensitive | Meadows and seeps.   | Alkaline meadows. 1025-3200m.   |
| <i>Epilobium oreganum</i>                                  | Oregon fireweed                       | None                   | None                 | 1B.2      | BLM-Sensitive; USFS-Sensitive | Bogs and fens, meadows, lower montane coniferous forest, upper montane coniferous forest.                              | In and near springs and bogs; at least sometimes on serpentine. 500-2610m.  |
| <i>Ivesia pickeringii</i>                                  | Pickering's ivesia                    | None                   | None                 | 1B.2      | BLM-Sensitive; USFS-Sensitive | Lower montane coniferous forest, meadows.  | In summer-drying, hanging bogs on serpentine ledges. 800-1500m.   |
| <i>Calochortus longebarbatus</i> var. <i>longebarbatus</i> | long-haired star-tulip                | None                   | None                 | 1B.2      | BLM-Sensitive; USFS-Sensitive | Meadows, lower montane coniferous forest.  | In wet meadows or grassy areas along drainages within forest. Clay soils. 965-1900m.  |
| <i>Astragalus lemmonii</i>                                 | Lemmon's milk-vetch                   | None                   | None                 | 1B.2      | BLM-Sensitive; USFS-Sensitive | Great Basin scrub, meadows and seeps, marshes and swamps.  | Lakeshores, meadows and seeps. 1280-2200m.  |
| <i>Gentiana setigera</i>                                   | Mendocino gentian                     | None                   | None                 | 1B.2      | BLM-Sensitive; USFS-Sensitive | Lower montane coniferous forest, meadows.  | Meadows, seeps and bogs. Usually or always on serpentine. 490-1065m.  |
| <i>Oreostemma elatum</i>                                   | tall alpine-aster                     | None                   | None                 | 1B.2      | BLM-Sensitive; USFS-Sensitive | Bogs and fens, meadows and seeps, upper montane coniferous forest.   | Mesic sites. 1005-2100m.  |
| <i>Thelypodium howellii</i> ssp. <i>howellii</i>           | Howell's thelypodium                  | None                   | None                 | 1B.2      | BLM-Sensitive; USFS-Sensitive | Great Basin scrub, meadows and seeps.  | Moist alkaline meadows. 1200-1830m.   |
| <i>Mimulus pulchellus</i>                                  | yellow-lip pansy<br>monkeyflower      | None                   | None                 | 1B.2      | BLM-Sensitive; USFS-Sensitive | Lower montane coniferous forest, meadows and seeps.  | Sandy decomposed granite soils and moist meadows; vernal wet sites. 600-2000m.  |
| <i>Neviusia cliftonii</i>                                  | Shasta snow-wreath                    | None                   | None                 | 1B.2      | BLM-Sensitive; USFS-Sensitive | Lower montane coniferous forest, riparian woodland.  | Shaded, north-facing, or sheltered canyons. Sometimes on limestone. Mesic areas. 300-500m.                                    |
| <i>Raillardella pringlei</i>                               | showy raillardella                    | None                   | None                 | 1B.2      | BLM-Sensitive; USFS-Sensitive | Bogs and fens, meadows and seeps.  | Streambanks, wet meadows and bogs in areas of serpentinized rock. 1200-2200m.   |
| <i>Symphotrichum defoliatum</i>                            | San Bernardino aster                  | None                   | None                 | 1B.2      | BLM-Sensitive; USFS-Sensitive | Meadows and seeps, marshes and swamps, coastal scrub, cismontane woodland, lower montane coniferous forest, grassland. | Vernally mesic grassland or near ditches, streams and springs; disturbed areas. 2-2040m.                                      |
| <i>Mimulus purpureus</i>                                   | little purple monkeyflower            | None                   | None                 | 1B.2      | USFS-Sensitive                | Meadows and seeps, pebble plain, upper montane coniferous forest.  | Dry clay or gravelly soils under Jeffrey pines, along annual streams or vernal springs & seeps. 1900-2300m.                   |
| <i>Pyrocoma uniflora</i> var. <i>gossypina</i>             | Bear Valley pyrocoma                  | None                   | None                 | 1B.2      | USFS-Sensitive                | Pebble plain, meadows and seeps.   | Meadows, meadow edges, and along streams in or near pebble plain habitat. 1600-2300m.   |
| <i>Castilleja lasiorhyncha</i>                             | San Bernardino Mountains owl's-clover | None                   | None                 | 1B.2      | USFS-Sensitive                | Meadows, pebble plain, upper montane coniferous forest, chaparral.   | Mesic to drying soils in open areas of stream and meadow margins or of vernal wet areas. 1135-2390m.                          |
| <i>Packeria bernardina</i>                                 | San Bernardino ragwort                | None                   | None                 | 1B.2      | USFS-Sensitive                | Meadows and seeps, pebble plains, upper montane coniferous forest.   | Mesic, sometimes alkaline meadows, and dry rocky slopes. 1800-2300m.  |
| <i>Trifolium bolanderi</i>                                 | Bolander's clover                     | None                   | None                 | 1B.2      | USFS-Sensitive                | Meadows and seeps, lower montane coniferous forest, upper montane coniferous forest.                                   | Moist mountain meadows. 2075-2300m.   |
| <i>Fissidens pauperculus</i>                               | minute pocket moss                    | None                   | None                 | 1B.2      | USFS-Sensitive                | North coast coniferous forest.   | Moss growing on damp soil along the coast. 10-100m.   |
| <i>Campanula wilkinsiana</i>                               | Wilkins' harebell                     | None                   | None                 | 1B.2      | USFS-Sensitive                | Subalpine meadows, upper montane coniferous forest, subalpine coniferous forest.                                       | Often on streambanks in meadows. 1515-2600m.  |

Table J-2a. Plant Species Considered in this EIR (Aquatic, Wetland and Riparian species)

| Scientific Name                                       | Common name                           | Federal listing status | Calif listing status | CNPS List | Other Status                  | General Habitat   | Micro-Habitat  |
|---|---------------------------------------|------------------------|----------------------|-----------|-------------------------------|---|--|
| <i>Collomia rawsoniana</i>                            | Rawson's flaming trumpet              | None                   | None                 | 1B.2      | USFS-Sensitive                | Riparian forest, lower montane coniferous forest.   | On stabilized alluvium in riparian zones. 775-2060m.   |
| <i>Erigeron maniopotamicus</i>                        | Mad River fleabane daisy              | None                   | None                 | 1B.2      | USFS-Sensitive                | Meadows and seeps (open and dry), lower montane coniferous forest.  | Open slopes, disturbed areas (road cuts), tan-colored, rocky soils. 1350-1500m.  |
| <i>Thermopsis californica</i> var. <i>semota</i>      | velvety false lupine                  | None                   | None                 | 1B.2      | USFS-Sensitive                | Lower montane coniferous forest, meadows and seeps, cismontane woodland, valley and foothill grassland.         | Pine forests and meadow edges, on rocky slopes and outcrops, and along roadsides. 1030-1870m.                          |
| <i>Mimulus exiguus</i>                                | San Bernardino Mountains monkeyflower | None                   | None                 | 1B.2      | USFS-Sensitive                | Meadows and seeps, pebble plains, upper montane coniferous forest.  | Seeps and sandy sometimes disturbed soil in moist drainages of annual streams; clay soils. 1800-2315m.                 |
| <i>Viola primulifolia</i> ssp. <i>occidentalis</i>    | western white bog violet              | None                   | None                 | 1B.2      | USFS-Sensitive                | Bogs and fens, marshes and swamps.  | Streamside flats and bogs; serpentine soils. 100-990m.   |
| <i>Calochortus palmeri</i> var. <i>palmeri</i>        | Palmer's mariposa-lily                | None                   | None                 | 1B.2      | USFS-Sensitive                | Meadows and seeps, chaparral, lower montane coniferous forest.  | Vernally moist places in yellow-pine forest, chaparral. 600-2245m.   |
| <i>Lilium parryi</i>                                  | lemon lily                            | None                   | None                 | 1B.2      | USFS-Sensitive                | Lower montane coniferous forest, meadows and seeps, riparian forest, upper montane coniferous forest.           | Wet, mountainous terrain; gen in forested areas; on shady edges of streams, in open boggy meadows & seeps. 1300-2790m. |
| <i>Carex saliniformis</i>                             | deceiving sedge                       | None                   | None                 | 1B.2      |                               | Coastal prairie, coastal scrub, meadows and seeps, marshes and swamps (coastal salt).                           | Mesic sites. 3-230m.   |
| <i>Sisyrinchium funereum</i>                          | Death Valley blue-eyed grass          | None                   | None                 | 1B.3      |                               | Meadows and seeps.  | Alkaline meadows. 40-915m.   |
| <i>Gentiana plurisetosa</i>                           | Klamath gentian                       | None                   | None                 | 1B.3      |                               | Meadows and seeps, upper montane coniferous forest, lower montane coniferous forest.                            | Meadows in red fir and yellow pine forests; mesic sites. 1200-1900m.   |
| <i>Lotus oblongifolius</i> var. <i>cupreus</i>        | copper-flowered bird's-foot trefoil   | None                   | None                 | 1B.3      |                               | Meadows, upper montane coniferous forest (mesic).   | Wet meadow borders. 2400-2600m.  |
| <i>Balsamorhiza sericea</i>                           | silky balsamroot                      | None                   | None                 | 1B.3      | BLM-Sensitive                 | Lower montane coniferous forest, meadows.   | Collections from Douglas-fir forest, meadow, and Jeffrey pine forest. Can be on serpentine. 1310-1735m.                |
| <i>Phacelia leonis</i>                                | Siskiyou phacelia                     | None                   | None                 | 1B.3      | BLM-Sensitive                 | Upper montane coniferous forest, meadows and seeps.   | Sandy, moist soil, sometimes on serpentine. 1200-1950m.  |
| <i>Smilax jamesii</i>                                 | English Peak greenbriar               | None                   | None                 | 1B.3      | BLM-Sensitive; USFS-Sensitive | North Coast coniferous forest, broadleaved upland forest?, lower montane coniferous forest, marshes and swamps. | Along streams and lake margins. 665-1820m.   |
| <i>Heterotheca shevockii</i>                          | Shevock's golden-aster                | None                   | None                 | 1B.3      | BLM-Sensitive; USFS-Sensitive | Chaparral, cismontane woodland, riparian woodland.  | Ditches, crevices, shallow sand. 230-900m.   |
| <i>Phacelia inunctata</i>                             | playa phacelia                        | None                   | None                 | 1B.3      | BLM-Sensitive; USFS-Sensitive | Great Basin scrub, lower montane coniferous forest, playas.   | Dried edges of alkali lakes and sinks, inundated clay soils. 1330-2000m.   |
| <i>Eleocharis torticulmis</i>                         | California twisted spikerush          | None                   | None                 | 1B.3      | USFS-Sensitive                | Bogs and fens, meadows and seeps, lower montane coniferous forest.  | 1005-1175m.  |
| <i>Parnassia cirrata</i> var. <i>cirrata</i>          | San Bernardino grass-of-Parnassus     | None                   | None                 | 1B.3      | USFS-Sensitive                | Lower montane coniferous forest, upper montane coniferous forest, meadows and seeps.                            | Mesic sites, streamside, sometimes calcareous. 1250-2440m.   |
| <i>Carex tiogana</i>                                  | Tioga Pass sedge                      | None                   | None                 | 1B.3      | USFS-Sensitive                | Meadows.  | On terraces next to lakes; mesic sites. 3090-3310m.  |
| <i>Atriplex pusilla</i>                               | smooth saltbush                       | None                   | None                 | 2         |                               | Great Basin scrub, meadows and seeps.   | Known from hot springs, alkali springs. 1300-2000m.  |
| <i>Suksdorfia ranunculifolia</i>                      | buttercup-leaf suksdorfia             | None                   | None                 | 2         |                               | Upper montane coniferous forest, meadows and seeps.   | Mesic sites; rocky. 1500-2500m.  |
| <i>Hymenoxys odorata</i>                              | bitter hymenoxys                      | None                   | None                 | 2         |                               | Riparian scrub, Sonoran desert scrub.   | Sandy sites. 45-150m.  |
| <i>Cicuta maculata</i> var. <i>bolanderi</i>          | Bolander's water-hemlock              | None                   | None                 | 2.1       |                               | Marshes, fresh or brackish water.   | 0-200m.  |
| <i>Mimulus glabratus</i> ssp. <i>utahensis</i>        | Utah monkeyflower                     | None                   | None                 | 2.1       |                               | Meadows and seeps, pinyon and juniper woodland.   | 600-2000m.   |
| <i>Microseris borealis</i>                            | northern microseris                   | None                   | None                 | 2.1       |                               | Bogs and fens, meadows and seeps, lower montane coniferous forest.  | 940-2000m.   |
| <i>Saxifraga nuttallii</i>                            | Nuttall's saxifrage                   | None                   | None                 | 2.1       |                               | North Coast coniferous forest.  | Cliff walls, moss-covered rocks along creeks; mesic sites. One site in California: 75m.                                |
| <i>Rhynchospora globularis</i> var. <i>globularis</i> | round-headed beaked-rush              | None                   | None                 | 2.1       |                               | Marshes and swamps.   | Freshwater marsh. 45-60m.  |
| <i>Ranunculus hydrocharoides</i>                      | frog's-bit buttercup                  | None                   | None                 | 2.1       |                               | Marshes and swamps.   | In or bordering shallow springs or freshwater marshes in the mountains. 1100-2000m.                                    |
| <i>Carex comosa</i>                                   | bristly sedge                         | None                   | None                 | 2.1       |                               | Marshes and swamps.   | Lake margins, wet places; site below sea level is on a Delta island. -5-1005m.   |

**Table J-2a. Plant Species Considered in this EIR (Aquatic, Wetland and Riparian species)**

| Scientific Name  | Common name                   | Federal listing status | Calif listing status | CNPS List | Other Status   | General Habitat  | Micro-Habitat  |
|--|-------------------------------|------------------------|----------------------|-----------|----------------|--|--|
| <i>Taraxacum ceratophorum</i>                            | horned dandelion              | None                   | None                 | 2.1       |                | Meadows and seeps, valley and foothill grassland.  | Mesic sites. 2895m.  |
| <i>Plagiobothrys nitens</i>                              | shiny-nutlet popcorn-flower   | None                   | None                 | 2.1       |                | Alkaline meadows.  | Moist alkaline meadows, near springs. 1510-1600m.  |
| <i>Oxytropis deflexa</i> var. <i>sericea</i>             | blue pendent-pod oxytrope     | None                   | None                 | 2.1       |                | Upper montane coniferous forest, meadows and seeps.  | Moist meadows and turf banks in the White Mountains. 2800-3355m.   |
| <i>Trichocoronis wrightii</i> var. <i>wrightii</i>       | Wright's trichocoronis        | None                   | None                 | 2.1       |                | Marshes and swamps, riparian forest, meadows and seeps, vernal pools.  | Mud flats of vernal lakes, drying river beds, alkali meadows. 5-435m.  |
| <i>Limosella subulata</i>                                | Delta mudwort                 | None                   | None                 | 2.1       |                | Riparian scrub, freshwater marsh, brackish marsh. Probably the rarest of the suite of Delta rare plants.           | Usually on mud banks of the Delta in marshy or scrubby riparian associations; often with <i>Lilaeopsis masonii</i> . 0-3m. |
| <i>Carex hystericina</i>                                 | porcupine sedge               | None                   | None                 | 2.1       |                | Marshes and swamps.  | Wet places, such as stream edges. 610m.  |
| <i>Coralorrhiza trifida</i>                              | northern coralroot            | None                   | None                 | 2.1       |                | Lower montane coniferous forest, meadows.  | Wet, open to shaded, generally coniferous forest. In California, under firs, in partial shade. 1370-1700m.                 |
| <i>Calamagrostis crassiglumis</i>                        | Thurber's reed grass          | None                   | None                 | 2.1       |                | Coastal scrub, freshwater marsh.   | Usually in marshy swales surrounded by grassland or coastal scrub. 10-45m.   |
| <i>Malaxis monophyllos</i> ssp. <i>brachypoda</i>        | white bog adder's-mouth       | None                   | None                 | 2.1       | USFS-Sensitive | Meadows and seeps, bogs and fens, upper montane coniferous forest.   | Hillside bogs and mesic meadows. 2200-2700m.   |
| <i>Scheuchzeria palustris</i> var. <i>americana</i>      | American scheuchzeria         | None                   | None                 | 2.1       | USFS-Sensitive | Bogs and fens, marshes and swamps.   | Sphagnum bogs and on lake margins. 1360-2000m.   |
| <i>Imperata brevifolia</i>                               | California satintail          | None                   | None                 | 2.1       | USFS-Sensitive | Coastal scrub, chaparral, riparian scrub, mojavean scrub, meadows and seeps (alkali).                              | Mesic sites, alkali seeps, riparian areas. 0-500m.   |
| <i>Erythronium revolutum</i>                             | coast fawn lily               | None                   | None                 | 2.2       |                | Bogs and fens, broadleaved upland forest, North Coast coniferous forest.   | 0-1065m.   |
| <i>Juncus nevadensis</i> var. <i>inventus</i>            | Sierra rush                   | None                   | None                 | 2.2       |                | Bogs and fens.   | 0-10m.   |
| <i>Carex lyngbyei</i>                                    | Lyngbye's sedge               | None                   | None                 | 2.2       |                | Marshes and swamps (brackish or freshwater).   | 0m.  |
| <i>Erythronium klamathense</i>                           | Klamath fawn lily             | None                   | None                 | 2.2       |                | Upper montane coniferous forest, meadows and seeps.  | 1200-1850m.  |
| <i>Carex altherodes</i>                                  | wheat sedge                   | None                   | None                 | 2.2       |                | Meadows and seeps, marshes and swamps, pinyon-juniper woodland.  | 1300-1400m.  |
| <i>Mertensia cusickii</i>                                | Toiyabe bluebells             | None                   | None                 | 2.2       |                | Great Basin scrub, meadows and seeps.  | 1495-2500m.  |
| <i>Mertensia oblongifolia</i> var. <i>amoena</i>         | beautiful sagebrush bluebells | None                   | None                 | 2.2       |                | Great Basin scrub, meadows and seeps.  | 1630-2315m.  |
| <i>Juncus supiniformis</i>                               | hair-leaved rush              | None                   | None                 | 2.2       |                | Marshes and swamps, bogs and fens.   | 20-100m.   |
| <i>Geum aleppicum</i>                                    | Aleppo avens                  | None                   | None                 | 2.2       |                | Meadows, Great Basin scrub, lower montane coniferous forest.   | 450-1515m.   |
| <i>Sidalcea neomexicana</i>                              | Salt Spring checkerbloom      | None                   | None                 | 2.2       |                | Alkali playas, brackish marshes, chaparral, coastal scrub, lower montane coniferous forest, Mojavean desert scrub. | Alkali springs and marshes. 0-1500m.   |
| <i>Atriplex argentea</i> var. <i>hillmanii</i>           | Hillman's silverscale         | None                   | None                 | 2.2       |                | Great Basin scrub, meadows and seeps.  | Alkaline meadows in scrub. 1200-1700m.   |
| <i>Thelypodium integrifolium</i> ssp. <i>complanatum</i> | foxtail thelypodium           | None                   | None                 | 2.2       |                | Great Basin scrub, meadows and seeps.  | Alkaline or subalkaline soils; mesic sites. 1100-2500m.  |
| <i>Trientalis arctica</i>                                | arctic starflower             | None                   | None                 | 2.2       |                | Meadows and seeps, bogs and fens.  | Coastal boggy areas. 0-15m.  |
| <i>Perideridia parishii</i> ssp. <i>parishii</i>         | Parish's yampah               | None                   | None                 | 2.2       |                | Lower montane coniferous forest, meadows, upper montane coniferous forest.   | Damp meadows or along streambeds-prefers an open pine canopy. 1390-3000m.  |
| <i>Lewisia brachycalyx</i>                               | short-sepaled lewisia         | None                   | None                 | 2.2       |                | Lower montane coniferous forest, meadows.  | Dry to moist meadows in rich loam. 1400-2300m.   |
| <i>Alisma gramineum</i>                                  | grass alisma                  | None                   | None                 | 2.2       |                | Marshes and swamps.  | Freshwater marsh. 390-1800m.   |
| <i>Rhynchospora alba</i>                                 | white beaked-rush             | None                   | None                 | 2.2       |                | Bogs and fens, marshes and swamps.   | Freshwater marshes and sphagnum bogs. 60-2000m.  |
| <i>Cladium californicum</i>                              | California saw-grass          | None                   | None                 | 2.2       |                | Freshwater and alkali marshes, seeps.  | Freshwater or alkaline moist habitats. 60-600m.  |
| <i>Carex limosa</i>                                      | mud sedge                     | None                   | None                 | 2.2       |                | Bogs and fens, lower montane coniferous forest, meadows, marshes and swamps, upper montane coniferous forest.      | In floating bogs and soggy meadows and edges of lakes. 1200-2775m.   |

Table J-2a. Plant Species Considered in this EIR (Aquatic, Wetland and Riparian species)

| Scientific Name                                      | Common name                 | Federal listing status | Calif listing status | CNPS List | Other Status | General Habitat   | Micro-Habitat  |
|--|-----------------------------|------------------------|----------------------|-----------|--------------|---|--|
| <i>Downingia laeta</i>                               | Great Basin downingia       | None                   | None                 | 2.2       |              | Great Basin scrub, meadows and seeps, freshwater marshes, pinyon-juniper woodland, vernal pools.                            | In mesic sites or wetlands. 1220-2200m.                            |
| <i>Nama stenocarpum</i>                              | mud nama                    | None                   | None                 | 2.2       |              | Marshes and swamps.   | Lake shores, river banks, intermittently wet areas. 5-500m.        |
| <i>Carex lenticularis</i> var. <i>limnophila</i>     | lagoon sedge                | None                   | None                 | 2.2       |              | Bogs and fens, marshes and swamps, North Coast coniferous forest.   | Lakeshores, beaches. 0-6m.   |
| <i>Pinguicula macroceras</i>                         | horned butterwort           | None                   | None                 | 2.2       |              | Bogs and fens, meadows and seeps.   | Meadow edges, seepage areas, serpentine soil. 20-1820m.            |
| <i>Utricularia intermedia</i>                        | flat-leaved bladderwort     | None                   | None                 | 2.2       |              | Bogs and fens, meadows and seeps, marshes and swamps.   | Mesic meadows, lake margins, marshes, fens. 1200-2700m.            |
| <i>Coptis laciniata</i>                              | Oregon goldthread           | None                   | None                 | 2.2       |              | North coast coniferous forest, meadows and seeps.   | Mesic sites such as moist streambanks. 0-1000m.                    |
| <i>Utricularia ochroleuca</i>                        | cream-flowered bladderwort  | None                   | None                 | 2.2       |              | Mesic meadows, marshes near lakes.  | Mesic sites, including lake margins. 1435-1440m.                   |
| <i>Betula glandulosa</i>                             | dwarf resin birch           | None                   | None                 | 2.2       |              | Bogs and fens, lower montane coniferous forest, meadows and seeps, marshes and swamps, subalpine coniferous forest.         | Mesic sites. 1310-2285m.   |
| <i>Rhamnus alnifolia</i>                             | alder buckthorn             | None                   | None                 | 2.2       |              | Meadows and seeps, lower montane coniferous forest, upper montane coniferous forest, montane riparian scrub.                | Mesic sites. 1370-2130m.   |
| <i>Ranunculus macounii</i>                           | Macoun's buttercup          | None                   | None                 | 2.2       |              | Great Basin scrub, meadows and seeps, pinyon-juniper woodland.  | Mesic sites. 1400-1800m.   |
| <i>Packera indecora</i>                              | rayless mountain ragwort    | None                   | None                 | 2.2       |              | Meadows and seeps.  | Mesic sites. 1600-2000m.   |
| <i>Rhynchospora capitellata</i>                      | brownish beaked-rush        | None                   | None                 | 2.2       |              | Lower montane coniferous forest, meadows and seeps, marshes and swamps, upper montane coniferous forest.                    | Mesic sites. 455-2000m.  |
| <i>Carex arcta</i>                                   | northern clustered sedge    | None                   | None                 | 2.2       |              | Bogs and fens, North Coast coniferous forest.   | Mesic sites. 60-1400m.   |
| <i>Scirpus pendulus</i>                              | pendulous bulrush           | None                   | None                 | 2.2       |              | Meadows and seeps, freshwater marsh.  | Mesic sites. 800-1000m.  |
| <i>Carex sheldonii</i>                               | Sheldon's sedge             | None                   | None                 | 2.2       |              | Lower montane coniferous forest, marshes and swamps, riparian scrub.  | Mesic sites; along creeks and in wet meadows. 1065-1755m.          |
| <i>Puccinellia pumila</i>                            | dwarf alkali grass          | None                   | None                 | 2.2       |              | Meadows and seeps, marshes and swamps.  | Mineral spring meadows and coastal salt marshes. 1-10m.            |
| <i>Stellaria longifolia</i>                          | long-leaved starwort        | None                   | None                 | 2.2       |              | Meadows and seeps, riparian woodland.   | Moist areas. 900-1830m.  |
| <i>Lathyrus palustris</i>                            | marsh pea                   | None                   | None                 | 2.2       |              | Bogs & fens, lower montane coniferous forest, marshes & swamps, N. Coast coniferous forest, coastal prairie, coastal scrub. | Moist coastal areas. 1-100m.                                       |
| <i>Solidago gigantea</i>                             | giant goldenrod             | None                   | None                 | 2.2       |              | Meadows and seeps, marshes and swamps.  | Moist streambanks, lakesides, moist meadows. 1000-1500m.           |
| <i>Carex praticola</i>                               | northern meadow sedge       | None                   | None                 | 2.2       |              | Meadows.  | Moist to wet meadows. 0-3200m.                                     |
| <i>Carex leptalea</i>                                | bristle-stalked sedge       | None                   | None                 | 2.2       |              | Bogs and fens, meadows, marshes and swamps.   | Mostly known from bogs and wet meadows. 0-790m.                    |
| <i>Fimbristylis thermalis</i>                        | hot springs fimbriatylis    | None                   | None                 | 2.2       |              | Meadows (alkaline).   | Near hot springs. 120-1340m.                                       |
| <i>Pedicularis crenulata</i>                         | scalloped-leaved lousewort  | None                   | None                 | 2.2       |              | Meadows and seeps.  | Near streams in wet meadows. 2100-2300m.                           |
| <i>Schoenus nigricans</i>                            | black bog-rush              | None                   | None                 | 2.2       |              | Marshes and swamps.   | Often in alkaline marshes. 150-2000m.                              |
| <i>Carex scirpoidea</i> ssp. <i>pseudoscirpoidea</i> | western single-spiked sedge | None                   | None                 | 2.2       |              | Alpine boulder and rock field, meadows and seeps, subalpine coniferous forest.  | Often on limestone; mesic sites. 3200-3700m.                       |
| <i>Lycopodiella inundata</i>                         | inundated bog-clubmoss      | None                   | None                 | 2.2       |              | Bogs and fens, lower montane coniferous forest, marshes and swamps.   | Peat bogs, muddy depressions, pond margins. 0-1000m.               |
| <i>Potamogeton zosteriformis</i>                     | eel-grass pondweed          | None                   | None                 | 2.2       |              | Marshes and swamps.   | Ponds, lakes, streams. 0-1860m.                                    |
| <i>Iva hayesiana</i>                                 | San Diego marsh-elder       | None                   | None                 | 2.2       |              | Marshes and swamps, playas.   | Riverwashes. 10-500m.  |
| <i>Sanguisorba officinalis</i>                       | great burnet                | None                   | None                 | 2.2       |              | Bogs & fens, meadows & seeps, broadleaved upland forest, marshes & swamps, North Coast coniferous forest, riparian forest.  | Rocky serpentine seepage areas and along stream borders. 60-1400m. |

Table J-2a. Plant Species Considered in this EIR (Aquatic, Wetland and Riparian species)

| Scientific Name   | Common name                       | Federal listing status | Calif listing status | CNPS List | Other Status   | General Habitat   | Micro-Habitat  |
|---|-----------------------------------|------------------------|----------------------|-----------|----------------|---|--|
| <i>Antennaria lanata</i>                                  | wooly pussy-toes                  | None                   | None                 | 2.2       |                | Meadows and seeps.  | Rocky sites. 2225m in California.  |
| <i>Pseudognaphalium leucocephalum</i>                     | white rabbit-tobacco              | None                   | None                 | 2.2       |                | Riparian woodland, cismontane woodland, coastal scrub, chaparral.                                   | Sandy, gravelly sites. 0-2100m.  |
| <i>Potamogeton epihydrus</i> ssp. <i>nuttallii</i>        | Nuttall's ribbon-leaved pondweed  | None                   | None                 | 2.2       |                | Marshes and swamps.   | Shallow water, ponds, lakes, streams, irrigation ditches. 400-2110m.   |
| <i>Potamogeton filiformis</i>                             | slender-leaved pondweed           | None                   | None                 | 2.2       |                | Marshes and swamps.   | Shallow, clear water of lakes and drainage channels. 15-2310m.   |
| <i>Scutellaria galericulata</i>                           | marsh skullcap                    | None                   | None                 | 2.2       |                | Marshes and swamps, lower montane coniferous forest, meadows and seeps.                             | Swamps and wet places. 0-2100m.  |
| <i>Sphaeromeria potentilloides</i> var. <i>nitrophila</i> | alkali tansy-sage                 | None                   | None                 | 2.2       |                | Meadows and seeps, playas.  | Usually alkaline soils. 2100-2400m.  |
| <i>Downingia pusilla</i>                                  | dwarf downingia                   | None                   | None                 | 2.2       |                | Valley and foothill grassland (mesic sites), vernal pools.  | Vernal lake and pool margins with a variety of associates. In several types of vernal pools. 1-485m.   |
| <i>Parnassia parviflora</i>                               | small-flowered grass-of-Parnassus | None                   | None                 | 2.2       |                | Meadows and seeps.  | Wet areas. 2000-2800m.   |
| <i>Scutellaria lateriflora</i>                            | side-flowering skullcap           | None                   | None                 | 2.2       |                | Meadows and seeps, marshes and swamps.  | Wet meadows and marshes. -3-500m.  |
| <i>Mertensia bella</i>                                    | Oregon lungwort                   | None                   | None                 | 2.2       |                | Meadows and seeps, upper montane coniferous forest.   | Wet meadows, under taller herbs. 1420-2000m.   |
| <i>Carex vulpinoidea</i>                                  | brown fox sedge                   | None                   | None                 | 2.2       |                | Marshes and swamps, riparian woodland.  | Wet places. 30-1200m.  |
| <i>Sarcocornia utahensis</i>                              | Utah glasswort                    | None                   | None                 | 2.2       |                | Chenopod scrub, playas.   | Alkaline sites. 320m in California.  |
| <i>Plagiobothrys salsus</i>                               | desert popcorn-flower             | None                   | None                 | 2.2       |                | Chenopod scrub, marshes and swamps.   | Moist, alkaline mud flats. 605-1360m.  |
| <i>Sphenopholis obtusata</i>                              | prairie wedge grass               | None                   | None                 | 2.2       |                | Cismontane woodland, meadows and seeps.   | Open moist sites, along rivers and springs, alkaline desert seeps. 360-2325m.  |
| <i>Koeberlinia spinosa</i> ssp. <i>tenuispina</i>         | slender-spined all-thorn          | None                   | None                 | 2.2       |                | Sonoran desert scrub, riparian woodland.  | Usually in sandy washes. 145-510m.   |
| <i>Astragalus argophyllus</i> var. <i>argophyllus</i>     | silver-leaved milk-vetch          | None                   | None                 | 2.2       | BLM-Sensitive  | Meadows and seeps, playas.  | Alkaline and saline meadows, stream banks and lake shores, in stiff alluvial clays and loams. 1280-2350m.                                    |
| <i>Astragalus agrestis</i>                                | field milk-vetch                  | None                   | None                 | 2.2       | BLM-Sensitive  | Great Basin scrub, meadows and seeps.   | Vernally mesic sites. 1560-1650m.  |
| <i>Ivesia kingii</i> var. <i>kingii</i>                   | alkali ivesia                     | None                   | None                 | 2.2       | BLM-Sensitive  | Meadows, Great Basin scrub, playas.   | Alkaline meadows, alkaline flats, and low-lying alkaline basins; w/ <i>Distichlis</i> , <i>Sporobolus</i> , <i>Juncus</i> , etc. 1200-2130m. |
| <i>Botrychium virginianum</i>                             | rattlesnake fern                  | None                   | None                 | 2.2       | USFS-Sensitive | Bogs and fens.  | 1300m.   |
| <i>Thelypteris puberula</i> var. <i>sonorensis</i>        | Sonoran maiden fern               | None                   | None                 | 2.2       | USFS-Sensitive | Meadows and seeps.  | Along streams, seepage areas. 50-550m.   |
| <i>Ophioglossum pusillum</i>                              | northern adder's-tongue           | None                   | None                 | 2.2       | USFS-Sensitive | Marshes and swamps, meadows and seeps.  | Marsh edges, low pastures, grassy roadside ditches. Also described as in "open swamp." 1000-2000m.   |
| <i>Botrychium crenulatum</i>                              | scalloped moonwort                | None                   | None                 | 2.2       | USFS-Sensitive | Bogs and fens, meadows, lower montane coniferous forest, freshwater marsh.                          | Moist meadows, near creeks. 1500-2670m.  |
| <i>Meesia uliginosa</i>                                   | broad-nerved hump moss            | None                   | None                 | 2.2       | USFS-Sensitive | Meadows and seeps, bogs and fens, upper montane coniferous forest.                                  | Moss on damp soil. 1300-2500m.   |
| <i>Bruchia bolanderi</i>                                  | Bolander's bruchia                | None                   | None                 | 2.2       | USFS-Sensitive | Lower montane coniferous forest, meadows and seeps, upper montane coniferous forest.                | Moss which grows on damp clay soils. This species has an ephemeral nature and takes advantage of disturbed sites. 1700-2800m.                |
| <i>Swertia umpquaensis</i>                                | Umpqua green-gentian              | None                   | None                 | 2.2       | USFS-Sensitive | Lower montane coniferous forest, meadows and seeps, chaparral, North Coast coniferous forest.       | Mountain meadows; openings in forest. 1555-1900m.  |
| <i>Parnassia cirrata</i> var. <i>intermedia</i>           | Cascade grass-of-Parnassus        | None                   | None                 | 2.2       | USFS-Sensitive | Lower montane coniferous forest, upper montane coniferous forest, meadows and seeps, bogs and fens. | Rocky serpentine soil. 780-1980m.  |
| <i>Packera hesperia</i>                                   | western ragwort                   | None                   | None                 | 2.2       | USFS-Sensitive | Upper montane coniferous forest, meadows and seeps.   | Serpentine. 500-2500m.   |
| <i>Montia howellii</i>                                    | Howell's montia                   | None                   | None                 | 2.2       | USFS-Sensitive | Meadows, North Coast coniferous forest, vernal pools.   | Vernally wet sites; often on compacted soil. 0-400m.   |
| <i>Drosera anglica</i>                                    | English sundew                    | None                   | None                 | 2.3       |                | Bogs and fens, meadows.   | 1300-2000m.  |
| <i>Sidalcea multifida</i>                                 | cut-leaf checkerbloom             | None                   | None                 | 2.3       |                | Lower montane coniferous forest, meadows and seeps, Great Basin scrub, pinyon and juniper woodland. | 1750-2800m.  |
| <i>Carex occidentalis</i>                                 | western sedge                     | None                   | None                 | 2.3       |                | Lower montane coniferous forest, meadows and seeps.   | 1900m.   |

Table J-2a. Plant Species Considered in this EIR (Aquatic, Wetland and Riparian species)

| Scientific Name                                     | Common name               | Federal listing status | Calif listing status | CNPS List | Other Status   | General Habitat   | Micro-Habitat  |
|---|---------------------------|------------------------|----------------------|-----------|----------------|---|--|
| <i>Woffia brasiliensis</i>                          | Brazilian watermeal       | None                   | None                 | 2.3       |                | Shallow freshwater marshes.   | 30-100m.   |
| <i>Carex petasata</i>                               | Liddon's sedge            | None                   | None                 | 2.3       |                | Lower montane coniferous forest, meadows.   | 600-3200m.   |
| <i>Ribes hudsonianum</i> var. <i>petiolare</i>      | western black currant     | None                   | None                 | 2.3       |                | Riparian scrub.   | Along creeks with <i>Salix</i> , <i>Heracleum</i> , etc. 1500-2215m.   |
| <i>Epilobium luteum</i>                             | yellow willowherb         | None                   | None                 | 2.3       |                | Lower montane coniferous forest, meadows.   | Along streams and in seeps. 1500-1705m.  |
| <i>Saxifraga cespitosa</i>                          | tufted saxifrage          | None                   | None                 | 2.3       |                | Meadows and seeps.  | Damp, rocky places. 915-2760m.   |
| <i>Potamogeton robbinsii</i>                        | Robbins' pondweed         | None                   | None                 | 2.3       |                | Marshes and swamps.   | Deep water, lakes. 1520-3500m.   |
| <i>Potamogeton praelongus</i>                       | white-stemmed pondweed    | None                   | None                 | 2.3       |                | Marshes and swamps.   | Deep water, lakes. 1645-3000m.   |
| <i>Carex californica</i>                            | California sedge          | None                   | None                 | 2.3       |                | Bogs and fens, closed-cone coniferous forest, coastal prairie, meadows, marshes and swamps. | Meadows, drier areas of swamps, marsh margins. 90-250m.  |
| <i>Juncus nodosus</i>                               | knotted rush              | None                   | None                 | 2.3       |                | Meadows, marshes and swamps.  | Mesic sites and lake margins. 1130-1700m.  |
| <i>Juncus regelii</i>                               | Regele's rush             | None                   | None                 | 2.3       |                | Upper montane coniferous forest, meadows and seeps.   | Mesic sites. 760-1900m.  |
| <i>Carex viridula</i> var. <i>viridula</i>          | green yellow sedge        | None                   | None                 | 2.3       |                | Bogs and fens, marshes and swamps (freshwater), North Coast coniferous forest.              | Mesic sites. 0-1600m.  |
| <i>Nemophila breviflora</i>                         | Great Basin nemophila     | None                   | None                 | 2.3       |                | Great Basin scrub, meadows and seeps, upper montane coniferous forest.                      | Mesic sites. 1220-2410m.   |
| <i>Carex vallicola</i>                              | western valley sedge      | None                   | None                 | 2.3       |                | Great Basin scrub, meadows and seeps.   | Mesic sites. 1525-2805m.   |
| <i>Triglochin palustris</i>                         | marsh arrow-grass         | None                   | None                 | 2.3       |                | Meadows and seeps, freshwater marsh, subalpine coniferous forest.                           | Mesic sites. 2285-3700m.   |
| <i>Draba praealta</i>                               | tall draba                | None                   | None                 | 2.3       |                | Meadows and seeps.  | Mesic sites. 2500-3415m.   |
| <i>Epilobium palustre</i>                           | marsh willowherb          | None                   | None                 | 2.3       |                | Bogs and fens, meadows and seeps.   | Mesic sites. Known in California only from Grass Lake, El Dorado County. 2200m.  |
| <i>Lysimachia thyrsoiflora</i>                      | tufted loosestrife        | None                   | None                 | 2.3       |                | Meadows (mesic), marshes, upper montane coniferous forest.                                  | Mesic sites; known from lake margins, along streams and in wet meadows. 975-1675m.                                       |
| <i>Carex serpenticola</i>                           | serpentine sedge          | None                   | None                 | 2.3       |                | Meadows and seeps.  | Mesic, serpentine sites. 60-1200m.   |
| <i>Schoenoplectus subterminalis</i>                 | water bulrush             | None                   | None                 | 2.3       |                | Marshes and swamps.   | Montane lake margins, in shallow water. 750-2335m.   |
| <i>Schoenoplectus heterochaetus</i>                 | slender bulrush           | None                   | None                 | 2.3       |                | Marshes and swamps, lower montane coniferous forest.  | Montane lake margins. In California: 1600m.  |
| <i>Erigeron nivalis</i>                             | snow fleabane daisy       | None                   | None                 | 2.3       |                | Alpine boulder and rock field, meadows and seeps, subalpine coniferous forest.              | On volcanic rock outcrops in cracks and crevices. 1955-2900m.  |
| <i>Agrostis humilis</i>                             | mountain bent grass       | None                   | None                 | 2.3       |                | Alpine boulder and rock field, meadows and seeps, subalpine coniferous forest.              | Probably undercollected; high elevation grass. 2700-3200m.   |
| <i>Potentilla newberryi</i>                         | Newberry's cinquefoil     | None                   | None                 | 2.3       |                | Marshes and swamps.   | Receding shorelines; drying marsh margins. 1290-2200m.   |
| <i>Potamogeton foliosus</i> var. <i>fibrillosus</i> | fibrous pondweed          | None                   | None                 | 2.3       |                | Marshes and swamps.   | Shallow water, small streams. 5-1300m.   |
| <i>Carex lasiocarpa</i>                             | woolly-fruited sedge      | None                   | None                 | 2.3       |                | Bogs and fens, marshes and swamps.  | Sphagnum bogs, freshwater marsh, and probably other moss-dominated habitats as well. 1800-2100m.                         |
| <i>Salix bebbiana</i>                               | Bebb's willow             | None                   | None                 | 2.3       |                | Riparian scrub, marshes and swamps.   | Streambanks, lakeshores. 1200-1400m.   |
| <i>Glyceria grandis</i>                             | American manna grass      | None                   | None                 | 2.3       |                | Meadows.  | Wet meadows, ditches, streams, and ponds in valleys and lower elevations in the mountains. 15-1980m.                     |
| <i>Hierochloa odorata</i>                           | nodding vanilla-grass     | None                   | None                 | 2.3       |                | Meadows and seeps.  | Wet sites. 1500-1895m.   |
| <i>Androsace filiformis</i>                         | slender-stemmed androsace | None                   | None                 | 2.3       |                | Upper montane coniferous forest, meadows and seeps.   | Wet, clay, meadow soil with grasses and sedges; sometimes on streambanks; in somewhat disturbed sites (by cattle). 1800m |
| <i>Suaeda occidentalis</i>                          | western seablite          | None                   | None                 | 2.3       |                | Great Basin scrub.  | Alkaline soils; mesic sites.   |
| <i>Botrychium pinnatum</i>                          | northwestern moonwort     | None                   | None                 | 2.3       | USFS-Sensitive | Lower montane coniferous forest, meadows, upper montane coniferous forest.                  | Creekbanks. 1770-2010m.  |
| <i>Helodium blandowii</i>                           | Blandow's bog moss        | None                   | None                 | 2.3       | USFS-Sensitive | Meadows and seeps, bogs and fens, subalpine coniferous forest.                              | Moss growing on damp soil. 2000-2700m.   |

Table J-2a. Plant Species Considered in this EIR (Aquatic, Wetland and Riparian species)

| Scientific Name           | Common name       | Federal listing status | Calif listing status | CNPS List | Other Status   | General Habitat                           | Micro-Habitat                     |
|---------------------------|-------------------|------------------------|----------------------|-----------|----------------|---|-----------------------------------|
| <i>Gentiana fremontii</i> | Fremont's gentian | None                   | None                 | 2.3       | USFS-Sensitive | Meadows, upper montane coniferous forest. | Wet mountain meadows. 2400-2700m. |



**Table J-2b. Plant Species Considered in this EIR (Upland species)**

| Scientific Name  | Common name                         | Federal listing status | Calif listing status | CNPS List | Other Status   | General Habitat   | Micro-Habitat   |
|--|-------------------------------------|------------------------|----------------------|-----------|----------------|---|---|
| <i>Amsinckia grandiflora</i>                             | large-flowered fiddleneck           | Endangered             | Endangered           | 1B.1      |                | Cismontane woodland, valley and foothill grassland.   | Annual grassland in various soils. 275-550m.  |
| <i>Opuntia basilaris</i> var. <i>treleasei</i>           | Bakersfield cactus                  | Endangered             | Endangered           | 1B.1      | USFS-Sensitive | Chenopod scrub, valley and foothill grassland, cismontane woodland.                                   | Coarse or cobbly well-drained granitic sand on bluffs, low hills, and flats within grassland. 90-550m.                      |
| <i>Lupinus nipomensis</i>                                | Nipomo Mesa lupine                  | Endangered             | Endangered           | 1B.1      |                | Coastal dunes.  | Dry sandy flats, restricted to back dunes, assoc. with central dune scrub habitat - a rare community type. 10-50m.          |
| <i>Pentachaeta lyonii</i>                                | Lyon's pentachaeta                  | Endangered             | Endangered           | 1B.1      |                | Chaparral, valley and foothill grassland.   | Edges of clearings in chap., usually at the ecotone btwn grassland and chaparral or edges of firebreaks. 30-630m.           |
| <i>Acanthomintha duttonii</i>                            | San Mateo thorn-mint                | Endangered             | Endangered           | 1B.1      |                | Chaparral, valley and foothill grassland, coastal scrub.  | Extant populations only known from very uncommon serpentine vertisol clays; in relatively open areas. 50-200m.              |
| <i>Dodecahema leptoceras</i>                             | slender-horned spineflower          | Endangered             | Endangered           | 1B.1      | USFS-Sensitive | Chaparral, coastal scrub (alluvial fan sage scrub).   | Flood deposited terraces and washes; assoc include <i>Encelia</i> , <i>Dalea</i> , <i>Lepidospartum</i> , etc. 200-760m.    |
| <i>Erysimum menziesii</i> ssp. <i>eurekaense</i>         | Humboldt Bay wallflower             | Endangered             | Endangered           | 1B.1      |                | Coastal dunes.  | Foredunes w/ <i>Artemisia pycnocephala</i> , <i>Solidago spathulata</i> , <i>Lathyrus</i> sp., etc. 0-10m.                  |
| <i>Erysimum menziesii</i> ssp. <i>yadonii</i>            | Yadon's wallflower                  | Endangered             | Endangered           | 1B.1      |                | Coastal dunes.  | Foredunes. 0-15m.   |
| <i>Lessingia germanorum</i>                              | San Francisco lessingia             | Endangered             | Endangered           | 1B.1      |                | Coastal scrub.  | From remnant dunes. Open sandy soils relatively free of competing plants. 20-125m.  |
| <i>Eriogonum apricum</i> var. <i>prostratum</i>          | Irish Hill buckwheat                | Endangered             | Endangered           | 1B.1      |                | Chaparral.  | Gravelly openings on lone formation soils. 90-120m.   |
| <i>Caulanthus californicus</i>                           | California jewel-flower             | Endangered             | Endangered           | 1B.1      | USFS-Sensitive | Chenopod scrub, valley and foothill grassland, pinyon-juniper woodland.                               | Historical from various valley habitats in both the Central Valley and Carrizo Plain. 65-900m.                              |
| <i>Monardella viminea</i>                                | willowy monardella                  | Endangered             | Endangered           | 1B.1      |                | 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; w/ <i>Baccharis</i> , <i>Iva</i> , etc. 50-225m. |
| <i>Eriogonum apricum</i> var. <i>apricum</i>             | lone buckwheat                      | Endangered             | Endangered           | 1B.1      |                | Chaparral.  | In gravelly openings on lone formation soil. 80-150m.   |
| <i>Eriastrum densifolium</i> ssp. <i>sanctorum</i>       | Santa Ana River woollystar          | Endangered             | Endangered           | 1B.1      | USFS-Sensitive | Coastal scrub, chaparral.   | In sandy soils on river floodplains or terraced fluvial deposits. 150-610m.   |
| <i>Erysimum teretifolium</i>                             | Santa Cruz wallflower               | Endangered             | Endangered           | 1B.1      |                | Lower montane coniferous forest, chaparral.   | Inland marine sands (Zayante coarse sand). 120-610m.  |
| <i>Deinandra increscens</i> ssp. <i>villosa</i>          | Gaviota tarplant                    | Endangered             | Endangered           | 1B.1      |                | Coastal scrub, valley and foothill grassland, coastal bluff scrub.                                    | Known from coastal terrace near Gaviota; sandy blowouts amid sandy loam soil; grassland/coast scrub ecotone. 35-430m.       |
| <i>Erysimum menziesii</i> ssp. <i>menziesii</i>          | Menzies' wallflower                 | Endangered             | Endangered           | 1B.1      |                | Coastal dunes.  | Localized on dunes and coastal strand. 0-35m.   |
| <i>Astragalus tener</i> var. <i>titi</i>                 | coastal dunes milk-vetch            | Endangered             | Endangered           | 1B.1      |                | Coastal bluff scrub, coastal dunes.   | Moist, sandy depressions of bluffs or dunes along and near the Pacific Ocean; one site on a clay terrace. 1-50m.            |
| <i>Eriophyllum latilobum</i>                             | San Mateo woolly sunflower          | Endangered             | Endangered           | 1B.1      |                | Cismontane woodland.  | Often on roadcuts; found on and off of serpentine. 45-150m.   |
| <i>Calystegia stebbinsii</i>                             | Stebbins' morning-glory             | Endangered             | Endangered           | 1B.1      |                | Chaparral, cismontane woodland.   | On red clay soils of the Pine Hill formation; gabbro or serpentine; open areas. 180-725m.                                   |
| <i>Layia carnosia</i>                                    | beach layia                         | Endangered             | Endangered           | 1B.1      |                | Coastal dunes. hugely reduced in range along California's North Coast dunes.                          | On sparsely vegetated, semi-stabilized dunes, usually behind foredunes. 0-75m.  |
| <i>Delphinium bakeri</i>                                 | Baker's larkspur                    | Endangered             | Endangered           | 1B.1      |                | Coastal scrub, grasslands.  | Only site occurs on NW-facing slope, on decomposed shale. Hist. known from grassy areas along fence-lines too. 90-205m.     |
| <i>Pentachaeta bellidiflora</i>                          | white-rayed pentachaeta             | Endangered             | Endangered           | 1B.1      |                | Valley and foothill grassland.  | Open dry rocky slopes and grassy areas, often on soils derived from serpentine bedrock. 35-620m.                            |
| <i>Lupinus tidestromii</i>                               | Tidestrom's lupine                  | Endangered             | Endangered           | 1B.1      |                | Coastal dunes. Includes <i>Lupinus tidestromii</i> var. <i>tidestromii</i> , State-listed Endangered. | Partially stabilized dunes, immediately near the ocean. 0-35m.  |
| <i>Oenothera deltoidea</i> ssp. <i>howellii</i>          | Antioch Dunes evening-primrose      | Endangered             | Endangered           | 1B.1      |                | Interior dunes.   | Remnant river bluffs and sand dunes east of Antioch. 0-30m.   |
| <i>Arabis macdonaldiana</i>                              | McDonald's rock-cress               | Endangered             | Endangered           | 1B.1      | USFS-Sensitive | Lower montane coniferous forest, upper montane coniferous forest.                                     | Rocky outcrops, ridges, slopes, and flats on serpentine. 135-1455m.   |
| <i>Chorizanthe orcuttiana</i>                            | Orcutt's spineflower                | Endangered             | Endangered           | 1B.1      |                | Coastal scrub, chaparral, closed-cone coniferous forest.  | Sandy sites and openings; sometimes in transition zones. 3-125m.  |
| <i>Chorizanthe valida</i>                                | Sonoma spineflower                  | Endangered             | Endangered           | 1B.1      |                | Coastal prairie.  | Sandy soil. 10-50m.   |
| <i>Cirsium fontinale</i> var. <i>fontinale</i>           | fountain thistle                    | Endangered             | Endangered           | 1B.1      |                | Valley and foothill grassland, chaparral.   | Serpentine seeps and grassland. 90-180m.  |
| <i>Erysimum capitatum</i> var. <i>angustatum</i>         | Contra Costa wallflower             | Endangered             | Endangered           | 1B.1      |                | Inland dunes.   | Stabilized dunes of sand and clay near Antioch along the San Joaquin River. 3-20m.  |
| <i>Malacothamnus fasciculatus</i> var. <i>nesioticus</i> | Santa Cruz Island bush-mallow       | Endangered             | Endangered           | 1B.1      |                | Coastal scrub, chaparral.   | Steep slopes and outcrops. 30-215m.   |
| <i>Cordylanthus palmatus</i>                             | palmer-bracted bird's-beak          | Endangered             | Endangered           | 1B.1      |                | Chenopod scrub, valley and foothill grassland.  | Usually on Pescadero silty clay which is alkaline, with <i>Distichlis</i> , <i>Frankenia</i> , etc. 5-155m.                 |
| <i>Dudleya traskiae</i>                                  | Santa Barbara Island dudleya        | Endangered             | Endangered           | 1B.2      |                | Coastal scrub, coastal bluff scrub.   | In shallow soil pockets on rocky cliffs, and on coastal terraces. 15-110m.  |
| <i>Cirsium fontinale</i> var. <i>obispoense</i>          | Chorro Creek bog thistle            | Endangered             | Endangered           | 1B.2      |                | Chaparral, cismontane woodland.   | Serpentine seeps. 35-365m.  |
| <i>Castilleja mollis</i>                                 | soft-leaved paintbrush              | Endangered             | None                 | 1B.1      |                | Coastal dunes, coastal bluff scrub.   | 5-20m.  |
| <i>Lesquerella kingii</i> ssp. <i>bernardina</i>         | San Bernardino Mountains bladderpod | Endangered             | None                 | 1B.1      |                | Pinyon and juniper woodland, lower montane coniferous forest.   | Dry sandy to rocky carbonate soils. 2030-2485m.   |
| <i>Malacothrix indecora</i>                              | Santa Cruz Island malacothrix       | Endangered             | None                 | 1B.1      |                | Coastal dunes, coastal bluff scrub, chaparral.  | Exposed sites on dry ridges and sea bluffs. 5-60m.  |
| <i>Sidalcea keckii</i>                                   | Keck's checkerbloom                 | Endangered             | None                 | 1B.1      | USFS-Sensitive | Cismontane woodland, valley and foothill grassland  | Grassy slopes in blue oak woodland. 180-425m.   |
| <i>Chorizanthe robusta</i> var. <i>hartwegii</i>         | Scotts Valley spineflower           | Endangered             | None                 | 1B.1      |                | Meadows, valley and foothill grassland.   | In grasslands with mudstone and sandstone outcrops. 230-245m.   |
| <i>Gilia tenuiflora</i> ssp. <i>hoffmannii</i>           | Hoffmann's slender-flowered gilia   | Endangered             | None                 | 1B.1      |                | Coastal dunes, coastal scrub.   | Island dunes; sandy soil. 5-30m.  |

Table J-2b. Plant Species Considered in this EIR (Upland species)

| Scientific Name                                       | Common name                           | Federal listing status | Calif listing status | CNPS List | Other Status   | General Habitat   | Micro-Habitat   |
|---|---------------------------------------|------------------------|----------------------|-----------|----------------|---|---|
| <i>Eriogonum ovalifolium</i> var. <i>vineum</i>       | Cushenbury buckwheat                  | Endangered             | None                 | 1B.1      | USFS-Sensitive | Mojavean desert scrub, pinyon-juniper woodland, Joshua tree woodland.                                       | Limestone mountain slopes. Dry, usually rocky places. 1400-2440m.   |
| <i>Eremalche kernensis</i>                            | Kern mallow                           | Endangered             | None                 | 1B.1      | USFS-Sensitive | Chenopod scrub, valley and foothill grassland.  | On dry, open sandy to clayey soils; usually within valley saltbush scrub; often at edge of balds. 70-515m.                                |
| <i>Dudleya setchellii</i>                             | Santa Clara Valley dudleya            | Endangered             | None                 | 1B.1      |                | Valley and foothill grassland, cismontane woodland.   | On rocky serpentine outcrops and on rocks within grassland or woodland. 80-335m.  |
| <i>Piperia yadonii</i>                                | Yadon's rein orchid                   | Endangered             | None                 | 1B.1      |                | Closed-cone coniferous forest, chaparral, coastal bluff scrub.  | On sandstone and sandy soil, but poorly drained and often dry. 10-415m.   |
| <i>Fritillaria gentneri</i>                           | Gentner's fritillary                  | Endangered             | None                 | 1B.1      | USFS-Sensitive | Cismontane woodland, chaparral?   | Open sites at edge of woodland or chaparral (in Oregon); sometimes on serpentine. 1080-1120m.   |
| <i>Astragalus brauntonii</i>                          | Braunton's milk-vetch                 | Endangered             | None                 | 1B.1      | USFS-Sensitive | Closed-cone coniferous forest, chaparral, coastal scrub, valley and foothill grassland.                     | Recent burns or disturbed areas; in stiff gravelly clay soils overlying granite or limestone. 4-640m.                                     |
| <i>Streptanthus albidus</i> ssp. <i>albidus</i>       | Metcalf Canyon jewel-flower           | Endangered             | None                 | 1B.1      |                | Valley and foothill grassland.  | Relatively open areas in dry grassy meadows on serpentine soils; also on serpentine balds. 45-245m.                                       |
| <i>Ambrosia pumila</i>                                | San Diego ambrosia                    | Endangered             | None                 | 1B.1      |                | Chaparral, coastal scrub, valley and foothill grassland.  | Sandy loam or clay soil. in valleys; persists where disturbance has been superficial. Sometimes on margins or near vernal pools. 20-415m. |
| <i>Astragalus albens</i>                              | Cushenbury milk-vetch                 | Endangered             | None                 | 1B.1      | USFS-Sensitive | Joshua tree woodland, Mojavean desert scrub, pinyon and juniper woodland.                                   | Sandy or stony flats, rocky hillsides, cyn washes, & fans, on granite or mixed granitic-calcareous debris. 1095-2000m.                    |
| <i>Chorizanthe robusta</i> var. <i>robusta</i>        | robust spineflower                    | Endangered             | None                 | 1B.1      | BLM-Sensitive  | Cismontane woodland, coastal dunes, coastal scrub.  | Sandy terraces and bluffs or in loose sand. 3-120m.   |
| <i>Trifolium amoenum</i>                              | showy rancheria clover                | Endangered             | None                 | 1B.1      |                | Valley and foothill grassland, coastal bluff scrub.   | Sometimes on serpentine soil, open sunny sites, swales. Most recently sited on roadside and eroding cliff face. 5-560m.                   |
| <i>Arabis hoffmannii</i>                              | Hoffmann's rock-cress                 | Endangered             | None                 | 1B.1      |                | Coastal bluff scrub.  | Volcanic cliff edges. 75-380m.  |
| <i>Chorizanthe pungens</i> var. <i>hartwegiana</i>    | Ben Lomond spineflower                | Endangered             | None                 | 1B.1      |                | Lower montane coniferous forest.  | Zayante coarse sands in maritime ponderosa pine sandhills. 120-470m.  |
| <i>Monolopia congonii</i>                             | San Joaquin woollythreads             | Endangered             | None                 | 1B.2      | USFS-Sensitive | Chenopod scrub and valley and foothill grassland.   | Alkaline or loamy plains; sandy soils, often with grasses and within chenopod scrub. 60-800m.   |
| <i>Astragalus tricarlinatus</i>                       | triple-ribbed milk-vetch              | Endangered             | None                 | 1B.2      | USFS-Sensitive | Joshua tree woodland, Sonoran desert scrub.   | Hot, rocky slopes in canyons and along edge of boulder-strewn desert washes, w/ Larrea and Encelia. 450-790m.                             |
| <i>Astragalus lentiginosus</i> var. <i>coacheliae</i> | Coachella Valley milk-vetch           | Endangered             | None                 | 1B.2      | USFS-Sensitive | Sonoran desert scrub.   | Sandy flats, washes, outwash fans, sometimes on dunes. 60-360m.   |
| <i>Delphinium luteum</i>                              | golden larkspur                       | Endangered             | Rare                 | 1B.1      |                | Chaparral, coastal prairie, coastal scrub.  | North-facing rocky slopes. 0-100m.  |
| <i>Clarkia speciosa</i> ssp. <i>immaculata</i>        | Pismo clarkia                         | Endangered             | Rare                 | 1B.1      |                | Chaparral, cismontane woodland, valley and foothill grassland.  | On ancient sand dunes not far from the coast. sandy soils, openings. 25-185m.   |
| <i>Cordylanthus tenuis</i> ssp. <i>capillaris</i>     | Pennell's bird's-beak                 | Endangered             | Rare                 | 1B.2      |                | Closed-cone coniferous forest, chaparral.   | In open or disturbed areas on serpentine within forest or chaparral. 45-230m.   |
| <i>Galium californicum</i> ssp. <i>sierrae</i>        | El Dorado bedstraw                    | Endangered             | Rare                 | 1B.2      |                | Cismontane woodland, chaparral, lower montane coniferous forest.  | More often in pine-oak woodland than in chaparral; restricted to gabbroic soils. 100-585m.  |
| <i>Eriodictyon capitatum</i>                          | Lompoc yerba santa                    | Endangered             | Rare                 | 1B.2      |                | Closed-cone coniferous forest, chaparral.   | Sandy soils on terraces. 40-455m.   |
| <i>Allium munzii</i>                                  | Munz's onion                          | Endangered             | Threatened           | 1B.1      | USFS-Sensitive | Chaparral, coastal scrub, cismontane woodland, pinyon-juniper woodland, valley and foothill grassland.      | Heavy clay soils; grows in grasslands & openings within shrublands or woodlands. 300-1035m.   |
| <i>Astragalus claranus</i>                            | Clara Hunt's milk-vetch               | Endangered             | Threatened           | 1B.1      |                | Cismontane woodland, valley and foothill grassland, chaparral.  | Open grassy hillsides, esp. on exposed shoulders in thin, volcanic clay soil moist in spring. 75-235m.                                    |
| <i>Gilia tenuiflora</i> ssp. <i>arenaria</i>          | sand gilia                            | Endangered             | Threatened           | 1B.2      |                | Coastal dunes, coastal scrub, chaparral (maritime), cismontane woodland.                                    | Bare, wind-sheltered areas often near dune summit or in the hind dunes; 2 records from Pleistocene inland dunes. 0-245m.                  |
| <i>Castilleja affinis</i> ssp. <i>neglecta</i>        | Tiburon paintbrush                    | Endangered             | Threatened           | 1B.2      |                | Valley and foothill grassland.  | Rocky serpentine sites. 75-400m.  |
| <i>Chorizanthe howellii</i>                           | Howell's spineflower                  | Endangered             | Threatened           | 1B.2      |                | Coastal dunes, coastal prairie, coastal scrub.  | Sand dunes, sandy slopes, and sandy areas in coastal prairie. 0-35m.  |
| <i>Deinandra conjugens</i>                            | Otay tarplant                         | Threatened             | Endangered           | 1B.1      |                | Coastal scrub, valley and foothill grassland.   | Coastal plains, mesas, and river bottoms; often in open, disturbed areas; clay soils. 25-300m.  |
| <i>Acanthomintha ilicifolia</i>                       | San Diego thorn-mint                  | Threatened             | Endangered           | 1B.1      | USFS-Sensitive | Chaparral, coastal scrub, valley and foothill grassland, vernal pools.                                      | Endemic to active vertisol clay soils of mesas & valleys. Use on clay lenses w/in grassland or chap communities. 10-935m.                 |
| <i>Pseudobahia peirsonii</i>                          | San Joaquin adobe sunburst            | Threatened             | Endangered           | 1B.1      | USFS-Sensitive | Valley and foothill grassland, cismontane woodland.   | Grassy valley floors and rolling foothills in heavy clay soil. 85-800m.   |
| <i>Brodiaea pallida</i>                               | Chinese Camp brodiaea                 | Threatened             | Endangered           | 1B.1      |                | Valley and foothill grassland.  | In flat, rocky, intermittent streambed on serpentine. 385m.   |
| <i>Holocarpha macradenia</i>                          | Santa Cruz tarplant                   | Threatened             | Endangered           | 1B.1      |                | Coastal prairie, valley and foothill grassland.   | Light, sandy soil or sandy clay; often with nonnatives. 10-260m.  |
| <i>Baccharis vanessae</i>                             | Encinitas baccharis                   | Threatened             | Endangered           | 1B.1      | USFS-Sensitive | Chaparral.  | On sandstone soils in steep, open, rocky areas with chaparral associates. 60-720m.  |
| <i>Clarkia springvillensis</i>                        | Springville clarkia                   | Threatened             | Endangered           | 1B.2      | USFS-Sensitive | Chaparral, cismontane woodland, valley and foothill grassland.  | Cutbanks and openings in blue oak woodland. Decomposed granite loam. 330-1220m.   |
| <i>Astragalus magdalenae</i> var. <i>peirsonii</i>    | Peirson's milk-vetch                  | Threatened             | Endangered           | 1B.2      |                | Desert dunes.   | Slopes and hollows in mobile dunes, usually to the lee of the prevailing winds. -55-250m.   |
| <i>Cirsium ciliolatum</i>                             | Ashland thistle                       | None                   | Endangered           | 2.1       | BLM-Sensitive  | Cismontane woodland, valley and foothill grassland.   | Dry, grassy, south-facing slopes with rock outcrops. 800-1400m.   |
| <i>Lotus argophyllus</i> var. <i>niveus</i>           | Santa Cruz Island bird's-foot trefoil | None                   | Endangered           | 4.2       |                | Chaparral, coastal scrub.   | Dry rocky places and canyon walls of interior coastal sage/chaparral on Santa Cruz Island. 5-650m.  |
| <i>Silene campanulata</i> ssp. <i>campanulata</i>     | Red Mountain catchfly                 | None                   | Endangered           | 4.2       | BLM-Sensitive  | Lower montane coniferous forest, chaparral. State-listed endangered, but CNPS List 4; EO's mostly archived. | Rocky dry shallow serpentine soil. 420-1200m. Element occurrences archived; CNPS List 4.  |

**Table J-2b. Plant Species Considered in this EIR (Upland species)**

| Scientific Name   | Common name                     | Federal listing status | Calif listing status | CNPS List | Other Status                  | General Habitat  | Micro-Habitat   |
|---|---------------------------------|------------------------|----------------------|-----------|-------------------------------|--|---|
| <i>Astragalus agnicidus</i>                               | Humboldt milk-vetch             | None                   | Endangered           | 1B.1      | BLM-Sensitive                 | Broadleaved upland forest, redwood forest.   | Disturbed openings in partially timbered forest lands; also along ridgelines; south aspects. 575-750m.                |
| <i>Fritillaria roderickii</i>                             | Roderick's fritillary           | None                   | Endangered           | 1B.1      |                               | Coastal bluff scrub, coastal prairie, valley and foothill grassland.                                     | Grassy slopes, mesas. 15-610m.  |
| <i>Plagiobothrys diffusus</i>                             | San Francisco popcorn-flower    | None                   | Endangered           | 1B.1      |                               | Valley and foothill grassland, coastal prairie.  | Historically from grassy slopes with marine influence. 60-485m.   |
| <i>Atriplex tularensis</i>                                | Bakersfield smallscale          | None                   | Endangered           | 1B.1      |                               | Chenopod scrub, alkali meadow.   | Historically in valley sink scrub or with saltgrass. 90-110m.   |
| <i>Astragalus lentiginosus</i> var. <i>sesquimetralis</i> | Sodaville milk-vetch            | None                   | Endangered           | 1B.1      |                               | Meadows.   | In open areas and under shrubs on alkaline clay soil surrounding springs. 950m.                                       |
| <i>Clarkia lingulata</i>                                  | Merced clarkia                  | None                   | Endangered           | 1B.1      | USFS-Sensitive                | Closed-cone coniferous forest, chaparral, cismontane woodland.   | Metamorphic gravels and talus and in red clay on north-facing slopes and in canyon bottoms. 400-455m.                 |
| <i>Cordylanthus rigidus</i> ssp. <i>littoralis</i>        | seaside bird's-beak             | None                   | Endangered           | 1B.1      | BLM-Sensitive                 | Closed-cone coniferous forest, chaparral, cismontane woodland, coastal scrub, coastal dunes.             | Sandy, often disturbed sites, usually within chaparral or coastal scrub. 0-215m.                                      |
| <i>Brodiaea coronaria</i> ssp. <i>rosea</i>               | Indian Valley brodiaea          | None                   | Endangered           | 1B.1      | BLM-Sensitive; USFS-Sensitive | Closed-cone coniferous forest, chaparral, cismontane woodland, valley and foothill grassland, meadows.   | Serpentine gravelly creek bottoms, and in meadows and swales. 335-1450m.  |
| <i>Nolina interrata</i>                                   | Dehesa nolina                   | None                   | Endangered           | 1B.1      | BLM-Sensitive                 | Chaparral.   | Typically on rocky hillsides or ravines on ultramafic soils (gabbro or metavolcanic). 180-855m.                       |
| <i>Brodiaea insignis</i>                                  | Kaweah brodiaea                 | None                   | Endangered           | 1B.2      | BLM-Sensitive; USFS-Sensitive | Cismontane woodland, valley and foothill grassland.  | Granite substates in deep, clayey soils on S-SW facing slopes; usu in grassland surr by foothill woodland. 150-1220m. |
| <i>Helianthus niveus</i> ssp. <i>tephrodes</i>            | Algodones Dunes sunflower       | None                   | Endangered           | 1B.2      | BLM-Sensitive                 | Desert dunes.  | On partialized stabilized desert dunes. 50-100m.  |
| <i>Eriogonum alpinum</i>                                  | Trinity buckwheat               | None                   | Endangered           | 1B.2      | USFS-Sensitive                | Subalpine coniferous forest, upper montane coniferous forest, alpine boulder and rock field.             | Rocky soils and scree slopes in open and windswept areas on serpentine substrate. 2200-2610m.                         |
| <i>Hesperolinon didymocarpum</i>                          | Lake County western flax        | None                   | Endangered           | 1B.2      | BLM-Sensitive                 | Chaparral, cismontane woodland, valley and foothill grassland.   | Serpentine soil in open grassland and near chaparral. 330-365m.   |
| <i>Chorizanthe parryi</i> var. <i>fernandina</i>          | San Fernando Valley spineflower | Candidate              | Endangered           | 1B.1      | USFS-Sensitive                | Coastal scrub.   | Sandy soils. 3-1035m.   |
| <i>Eriogonum kelloggii</i>                                | Kellogg's buckwheat             | Candidate              | Endangered           | 1B.2      | BLM-Sensitive                 | Lower montane coniferous forest, chaparral.  | Rocky, serpentine sites. 925-1220m.   |
| <i>Chlorogalum purpureum</i> var. <i>purpureum</i>        | purple amole                    | Threatened             | None                 | 1B.1      |                               | Cismontane woodland, valley and foothill grassland.  | Often in grassy areas with blue oaks in foothill woodland. 300-330m.  |
| <i>Erigeron parishii</i>                                  | Parish's daisy                  | Threatened             | None                 | 1B.1      | USFS-Sensitive                | Mojavean desert scrub, pinyon-juniper woodland, Joshua tree woodland.                                    | Often on carbonate; limestone mountain slopes; often assoc. with drainages. 1090-2000m.                               |
| <i>Calyptridium pulchellum</i>                            | Mariposa pussypaws              | Threatened             | None                 | 1B.1      | USFS-Sensitive                | Cismontane woodland.   | On granite domes, restricted to exposed sites. 400-1100m.   |
| <i>Camissonia benitensis</i>                              | San Benito evening-primrose     | Threatened             | None                 | 1B.1      |                               | Chaparral, cismontane woodland.  | On gravelly serpentine alluvial terraces. 750-1280m.  |
| <i>Trichostema austromontanum</i> ssp. <i>compactum</i>   | Hidden Lake bluecurfs           | Threatened             | None                 | 1B.1      |                               | Upper montane coniferous forest.   | Seasonally submerged lake margins, decomposed granite. One site known: 2665m.   |
| <i>Castilleja cinerea</i>                                 | ash-gray paintbrush             | Threatened             | None                 | 1B.2      | USFS-Sensitive                | Pebble plains, upper montane coniferous forest, Mojavean desert scrub, meadows, pinyon-juniper woodland. | Endemic to the San Bernardino Mountains, in clay openings; often in meadow edges. 1800-2835m.                         |
| <i>Dudleya parva</i>                                      | Conejo dudleya                  | Threatened             | None                 | 1B.2      |                               | Coastal scrub, valley and foothill grassland.  | In clayey or volcanic soils on rocky slopes and grassy hillsides. 60-450m.  |
| <i>Arenaria ursina</i>                                    | Big Bear Valley sandwort        | Threatened             | None                 | 1B.2      | USFS-Sensitive                | Pebble plain, pinyon and juniper woodland.   | Mesic, rocky sites. 1750-2900m.   |
| <i>Dudleya verityi</i>                                    | Verity's dudleya                | Threatened             | None                 | 1B.2      |                               | Chaparral, cismontane woodland, coastal scrub.   | On volcanic rock outcrops in the Santa Monica Mountains. 60-120m.   |
| <i>Helianthemum greenei</i>                               | island rush-rose                | Threatened             | None                 | 1B.2      |                               | Chaparral, coastal scrub, closed-cone coniferous forest.   | Rocky sites; usually in open places among pines or chaparral. 15-480m.  |
| <i>Dudleya cymosa</i> ssp. <i>agourensis</i>              | Agoura Hills dudleya            | Threatened             | None                 | 1B.2      |                               | Chaparral, cismontane woodland.  | Rocky, volcanic breccia. 200-500m.  |
| <i>Chorizanthe pungens</i> var. <i>pungens</i>            | Monterey spineflower            | Threatened             | None                 | 1B.2      |                               | Coastal dunes, chaparral, cismontane woodland, coastal scrub.  | Sandy soils in coastal dunes or more inland within chaparral or other habitats. 0-150m.                               |
| <i>Eriogonum kennedyi</i> var. <i>austromontanum</i>      | southern mountain buckwheat     | Threatened             | None                 | 1B.2      | USFS-Sensitive                | Pebble (pavement) plain, lower montane coniferous forest.  | Usually found in pebble plain habitats. 1755-2375m.   |
| <i>Dudleya cymosa</i> ssp. <i>marcescens</i>              | marcescent dudleya              | Threatened             | Rare                 | 1B.2      |                               | Chaparral.   | On sheer rock surfaces and rocky volcanic cliffs. 180-520m.   |
| <i>Packera layneae</i>                                    | Layne's ragwort                 | Threatened             | Rare                 | 1B.2      | USFS-Sensitive                | Chaparral, cismontane woodland.  | Ultramafic soil; occasionally along streams. 200-1000m.   |
| <i>Hesperolinon congestum</i>                             | Marin western flax              | Threatened             | Threatened           | 1B.1      |                               | Chaparral, valley and foothill grassland.  | In serpentine barrens and in serpentine grassland and chaparral. 30-365m.   |
| <i>Dudleya stolonifera</i>                                | Laguna Beach dudleya            | Threatened             | Threatened           | 1B.1      |                               | Chaparral, cismontane woodland, coastal scrub, valley and foothill grassland.                            | In thin soil on north-facing sandstone cliffs. 10-260m.   |
| <i>Verbena californica</i>                                | Red Hills vervain               | Threatened             | Threatened           | 1B.1      |                               | Cismontane woodland, valley and foothill grassland.  | Mesic sites on serpentine; usually serpentine seeps or creeks. 255-400m.  |

Table J-2b. Plant Species Considered in this EIR (Upland species)

| Scientific Name                            | Common name                | Federal listing status | Calif listing status | CNPS List | Other Status                  | General Habitat   | Micro-Habitat  |
|--|----------------------------|------------------------|----------------------|-----------|-------------------------------|---|--|
| <i>Fritillaria striata</i>                 | striped adobe-lily         | None                   | Threatened           | 1B.1      | BLM-Sensitive; USFS-Sensitive | Cismontane woodland, valley and foothill grassland.   | Heavy clay adobe soils in oak grassland. 135-1455m.  |
| <i>Lupinus milo-bakeri</i>                 | Milo Baker's lupine        | None                   | Threatened           | 1B.1      |                               | Cismontane woodland, valley and foothill grassland.   | In roadside ditches, dry gravelly areas along roads, and along small streams. 360-440m.  |
| <i>Dithyrea maritima</i>                   | beach spectaclepod         | None                   | Threatened           | 1B.1      | BLM-Sensitive                 | Coastal dunes, coastal scrub. formerly more widespread in coastal habitats in So. Calif.          | Sea shores, on sand dunes, and sandy places near the shore. 3-50m.   |
| <i>Carpenteria californica</i>             | tree-anemone               | None                   | Threatened           | 1B.2      | BLM-Sensitive; USFS-Sensitive | Cismontane woodland, chaparral.   | An very localized endemic found on well-drained granitic soils, mostly on N-facing ravines and drainages. 340-1340m.             |
| <i>Lupinus citrinus var. deflexus</i>      | Mariposa lupine            | None                   | Threatened           | 1B.2      | BLM-Sensitive                 | Chaparral, cismontane woodland.   | Decomposed granitic sand on hilltops and hillsides on western slope of the Sierra Nevada, mostly S. exp. 400-640m.               |
| <i>Cirsium rathophilum</i>                 | surf thistle               | None                   | Threatened           | 1B.2      | BLM-Sensitive                 | Coastal dunes, coastal bluff scrub.   | Open areas in central dune scrub; usually in coastal dunes. 3-60m.   |
| <i>Phacelia stellaris</i>                  | Brand's star phacelia      | Candidate              | None                 | 1B.1      |                               | Coastal scrub, coastal dunes.   | Open areas. 5-1515m.   |
| <i>Ivesia webberi</i>                      | Webber's ivesia            | Candidate              | None                 | 1B.1      | BLM-Sensitive; USFS-Sensitive | Great Basin scrub, lower montane coniferous forest.   | Rocky, volcanic soils. 1500-2075m.   |
| <i>Sedum eastwoodiae</i>                   | Red Mountain stonecrop     | Candidate              | None                 | 1B.2      | BLM-Sensitive                 | Lower montane coniferous forest.  | Serpentine soils among rocks. 600-1200m.   |
| <i>Dieteria asteroides var. lagunensis</i> | Mount Laguna aster         | None                   | Rare                 | 2.1       | BLM-Sensitive; USFS-Sensitive | Cismontane woodland, lower montane coniferous forest.   | Openings in woodland or forest. 800-2400m.   |
| <i>Croton wigginsii</i>                    | Wiggins' croton            | None                   | Rare                 | 2.2       | BLM-Sensitive                 | Desert dunes, Sonoran desert scrub.   | On sand dunes and sandy arroyos. 50-100m.  |
| <i>Calamagrostis foliosa</i>               | leafy reed grass           | None                   | Rare                 | 4.2       | BLM-Sensitive                 | Coastal bluff scrub, North Coast coniferous forest.   | Rocky cliffs and ocean-facing bluffs. 0-1220m. State-listed Rare. Element occurrences archived; CNPS List 4.                     |
| <i>Carex tompkinsii</i>                    | Tompkins' sedge            | None                   | Rare                 | 4.3       |                               | Chaparral, cismontane woodland, lower montane coniferous forest, upper montane coniferous forest. | Often on granitic substrate; sometimes also on soils from metamorphic rock. 420-1800m. Occ's archived; CNPS List 4.              |
| <i>Trifolium polyodon</i>                  | Pacific Grove clover       | None                   | Rare                 | 1B.1      | BLM-Sensitive                 | Closed-cone coniferous forest, meadows and seeps, coastal prairie.                                | Along small springs and seeps in grassy openings. 5-120m.  |
| <i>Eriogonum crocatum</i>                  | Conejo buckwheat           | None                   | Rare                 | 1B.2      |                               | Chaparral, coastal scrub, valley and foothill grassland.  | Conejo volcanic outcrops; rocky sites. 50-580m.  |
| <i>Pedicularis dudleyi</i>                 | Dudley's lousewort         | None                   | Rare                 | 1B.2      | USFS-Sensitive                | Chaparral, North Coast coniferous forest, valley and foothill grassland.                          | Deep shady woods of older coast redwood forests; also in maritime chaparral. 100-490m.   |
| <i>Sidalcea hickmanii ssp. parishii</i>    | Parish's checkerbloom      | None                   | Rare                 | 1B.2      | BLM-Sensitive; USFS-Sensitive | Chaparral, lower montane coniferous forest.   | Disturbed burned or cleared areas on dry, rocky slopes, in fuel breaks & fire roads along the mtn summits. 1000-2135m.           |
| <i>Eriogonum twisselmannii</i>             | Twisselmann's buckwheat    | None                   | Rare                 | 1B.2      | USFS-Sensitive                | Upper montane coniferous forest.  | Dry, granitic outcrops. 2255-2800m.  |
| <i>Eriastrum tracyi</i>                    | Tracy's eriastrum          | None                   | Rare                 | 1B.2      | BLM-Sensitive; USFS-Sensitive | Chaparral, cismontane woodland.   | Gravelly shale or clay; often in open areas. 315-760m.   |
| <i>Eriophyllum congdonii</i>               | Congdon's woolly sunflower | None                   | Rare                 | 1B.2      | USFS-Sensitive                | Chaparral, cismontane woodland, lower montane coniferous forest.                                  | In cracks in rock outcroppings, and on talus; sometimes with <i>Quercus douglasii</i> , <i>Aesculus californica</i> . 500-1900m. |
| <i>Astragalus johannis-howellii</i>        | Long Valley milk-vetch     | None                   | Rare                 | 1B.2      | BLM-Sensitive; USFS-Sensitive | Great Basin scrub.  | In sandy volcanic ash or pumice with sagebrush scrub. 2030-2530m.  |
| <i>Bloomeria humilis</i>                   | dwarf goldenstar           | None                   | Rare                 | 1B.2      | USFS-Sensitive                | Coastal bluff scrub, chaparral, valley and foothill grassland.                                    | Known mainly from Arroyo de La Cruz area on coastal bluffs. 10-60m.  |
| <i>Calochortus dunnii</i>                  | Dunn's mariposa-lily       | None                   | Rare                 | 1B.2      | BLM-Sensitive; USFS-Sensitive | Closed-cone coniferous forest, chaparral.   | On gabbro or metavolcanic soils; also known from sandstone; often assoc with chaparral. 375-1830m.                               |
| <i>Blennosperma nanum var. robustum</i>    | Point Reyes blennosperma   | None                   | Rare                 | 1B.2      |                               | Coastal prairie, coastal scrub.   | On open coastal hills in sandy soil. 10-145m.  |
| <i>Deinandra minthornii</i>                | Santa Susana tarplant      | None                   | Rare                 | 1B.2      | BLM-Sensitive                 | Chaparral, coastal scrub.   | On sandstone outcrops and crevices, in shrubland. 280-760m.  |
| <i>Astragalus monoensis</i>                | Mono milk-vetch            | None                   | Rare                 | 1B.2      | BLM-Sensitive; USFS-Sensitive | Great Basin scrub, upper montane coniferous forest.   | Pumice flats with sparse vegetative cover. 2110-3355m.   |

Table J-2b. Plant Species Considered in this EIR (Upland species)

| Scientific Name                                     | Common name                      | Federal listing status | Calif listing status | CNPS List | Other Status                  | General Habitat   | Micro-Habitat  |
|---|----------------------------------|------------------------|----------------------|-----------|-------------------------------|---|--|
| <i>Sidalcea hickmanii</i> ssp. <i>anomala</i>       | Cuesta Pass checkerbloom         | None                   | Rare                 | 1B.2      | BLM-Sensitive; USFS-Sensitive | Closed-cone coniferous forest.  | Rocky serpentine soil; associated with Sargent cypress forest. 600-800m.   |
| <i>Astragalus traskiae</i>                          | Trask's milk-vetch               | None                   | Rare                 | 1B.2      |                               | Coastal bluff scrub, coastal dunes, coastal scrub.  | Sandy, windswept ocean bluffs, gullied banks, and coastal dunes. 5-245m.   |
| <i>Thermopsis macrophylla</i>                       | Santa Ynez false lupine          | None                   | Rare                 | 1B.3      | USFS-Sensitive                | Chaparral. Includes <i>T. macrophylla</i> var. <i>agnina</i> , State-listed Rare.                 | In open areas such as fuel breaks, after burns; on sandstone. 420-2050m.   |
| <i>Allium yosemitense</i>                           | Yosemite onion                   | None                   | Rare                 | 1B.3      | USFS-Sensitive                | Broadleaved upland forest, chaparral, cismontane woodland, lower montane coniferous forest.       | In pockets of wet soil or in wet cracks of metamorphic rock; also on slopes and walls. 535-2200m.                      |
| <i>Lewisia congdonii</i>                            | Congdon's lewisia                | None                   | Rare                 | 1B.3      | BLM-Sensitive; USFS-Sensitive | Chaparral, lower montane coniferous forest, cismontane woodland, upper montane coniferous forest. | North exposures; in crevices on slopes among rocks. Granitic substrates. 600-2060m.                                    |
| <i>Eriogonum giganteum</i> var. <i>compactum</i>    | Santa Barbara Island buckwheat   | None                   | Rare                 | 1B.3      |                               | Coastal bluff scrub.  | Seabluffs; dry rocky outcrops and cliffs. 10-100m.   |
| <i>Eriastrum hooveri</i>                            | Hoover's eriastrum               | Delisted               | None                 | 4.2       | BLM-Sensitive; USFS-Sensitive | Chenopod scrub, valley and foothill grassland, pinyon and juniper woodland.                       | On sparsely vegetated alkaline alluvial fans; also in the Temblor Range on sandy soils. 50-915m.                       |
| <i>Leptosiphon rosaceus</i>                         | rose leptosiphon                 | None                   | None                 | 1B.1      |                               | Coastal bluff scrub.  | 0-100m.  |
| <i>Clarkia amoena</i> ssp. <i>whitneyi</i>          | Whitney's farewell-to-spring     | None                   | None                 | 1B.1      |                               | Coastal bluff scrub, coastal scrub.   | 10-100m.   |
| <i>Leptosiphon croceus</i>                          | coast yellow leptosiphon         | None                   | None                 | 1B.1      |                               | Coastal bluff scrub, coastal prairie.   | 10-150m.   |
| <i>Carex constanceana</i>                           | Constance's sedge                | None                   | None                 | 1B.1      |                               | Subalpine coniferous forest.  | 2000m.   |
| <i>Gilia capitata</i> ssp. <i>chamissonis</i>       | blue coast gilia                 | None                   | None                 | 1B.1      |                               | Coastal dunes, coastal scrub.   | 2-200m.  |
| <i>Opuntia californica</i> var. <i>californica</i>  | snake cholla                     | None                   | None                 | 1B.1      |                               | Chaparral, coastal scrub.   | 30-150m.   |
| <i>Calochortus syntrophus</i>                       | Callahan's mariposa-lily         | None                   | None                 | 1B.1      |                               | Cismontane woodland.  | 525-855m.  |
| <i>Tropidocarpum californicum</i>                   | Kings gold                       | None                   | None                 | 1B.1      |                               | Chenopod scrub.   | 65m.   |
| <i>Astragalus preussii</i> var. <i>laxiflorus</i>   | Lancaster milk-vetch             | None                   | None                 | 1B.1      |                               | Chenopod scrub.   | Alkaline clay flats or gravelly or sandy washes and along draws in gullied badlands. 725m in California.               |
| <i>Tropidocarpum capparideum</i>                    | caper-fruited tropidocarpum      | None                   | None                 | 1B.1      | USFS-Sensitive                | Valley and foothill grassland.  | Alkaline clay. 0-455m.   |
| <i>Phacelia parishii</i>                            | Parish's phacelia                | None                   | None                 | 1B.1      | BLM-Sensitive                 | Mojavean desert scrub, playas.  | Alkaline flats and slopes or on clay soils. 535-1200m.   |
| <i>Layia heterotricha</i>                           | pale-yellow layia                | None                   | None                 | 1B.1      | BLM-Sensitive; USFS-Sensitive | Cismontane woodland, pinyon-juniper woodland, valley and foothill grassland.                      | Alkaline or clay soils; open areas. 270-1365 (2675)m.  |
| <i>Isocoma arguta</i>                               | Carquinez goldenbush             | None                   | None                 | 1B.1      |                               | Valley and foothill grassland.  | Alkaline soils, flats, lower hills. On low benches near drainages & on tops & sides of mounds in swale habitat. 1-20m. |
| <i>Plagiobothrys parishii</i>                       | Parish's popcorn-flower          | None                   | None                 | 1B.1      |                               | Great Basin scrub, Joshua tree woodland.  | Alkaline soils; mesic sites. 750-1400m.  |
| <i>Eschscholzia rhombipetala</i>                    | diamond-petaled California poppy | None                   | None                 | 1B.1      | BLM-Sensitive                 | Valley and foothill grassland.  | Alkaline, clay slopes and flats. 0-975m.   |
| <i>Solanum wallacei</i>                             | Wallace's nightshade             | None                   | None                 | 1B.1      |                               | Chaparral, cismontane woodland.   | Canyons; rocky sites. 3-410m.  |
| <i>Eriogonum microthecum</i> var. <i>lacus-ursi</i> | Bear Lake buckwheat              | None                   | None                 | 1B.1      | USFS-Sensitive                | Lower montane coniferous forest.  | Clay outcrops. 2000-2100m.   |
| <i>California macrophylla</i>                       | round-leaved filaree             | None                   | None                 | 1B.1      | BLM-Sensitive                 | Cismontane woodland, valley and foothill grassland.   | Clay soils. 15-1200m.  |
| <i>Dudleya blochmaniae</i> ssp. <i>insularis</i>    | Santa Rosa Island dudleya        | None                   | None                 | 1B.1      |                               | Coastal bluff scrub.  | Coastal bluffs; on rock flat near beach near mouth of creek. 3m.   |
| <i>Penstemon albomarginatus</i>                     | white-margined beardtongue       | None                   | None                 | 1B.1      | BLM-Sensitive                 | Mojavean desert scrub, desert dunes.  | Deep stabilized desert sand, in washes and along roadsides. 635-1065m.   |
| <i>Astragalus atratus</i> var. <i>mensanus</i>      | Darwin Mesa milk-vetch           | None                   | None                 | 1B.1      | BLM-Sensitive                 | Great Basin scrub, Joshua tree woodland, pinyon-juniper woodland.                                 | Dry desert slopes and mesas, often sheltering under and entangled in shrubs, in volcanic clay and gravel. 1340-1850m.  |
| <i>Blepharizonia plumosa</i>                        | big tarplant                     | None                   | None                 | 1B.1      |                               | Valley and foothill grassland.  | Dry hills & plains in annual grassland. Clay to clay-loam soils; usually on slopes and often in burned areas. 15-455m. |
| <i>Layia leucopappa</i>                             | Comanche Point layia             | None                   | None                 | 1B.1      | BLM-Sensitive                 | Chenopod scrub, valley and foothill grassland.  | Dry hills in white-grey clay soils, often with weedy grasses. 100-350m.  |
| <i>Astragalus pachypus</i> var. <i>jaegeri</i>      | Jaeger's milk-vetch              | None                   | None                 | 1B.1      | USFS-Sensitive                | Coastal scrub, chaparral, valley and foothill grassland, cismontane woodland.                     | Dry ridges and valleys and open sandy slopes; often in grassland and oak-chaparral. 365-915m.                          |
| <i>Chorizanthe parryi</i> var. <i>parryi</i>        | Parry's spineflower              | None                   | None                 | 1B.1      | BLM-Sensitive; USFS-Sensitive | Coastal scrub, chaparral.   | Dry slopes and flats; sometimes at interface of 2 veg types, such as chap and oak w/dland; dry, sandy soils. 40-1705m. |
| <i>Eriogonum truncatum</i>                          | Mt. Diablo buckwheat             | None                   | None                 | 1B.1      |                               | Chaparral, coastal scrub, valley and foothill grassland.  | Dry, exposed clay or sandy substrates. 100-600m.   |
| <i>Stylocine citroleum</i>                          | oil neststraw                    | None                   | None                 | 1B.1      | BLM-Sensitive                 | Chenopod scrub, coastal scrub?  | Flats, clay soils in oil-producing areas. 50-300m.   |

Table J-2b. Plant Species Considered in this EIR (Upland species)

| Scientific Name   | Common name                      | Federal listing status | Calif listing status | CNPS List | Other Status                  | General Habitat  | Micro-Habitat   |
|---|----------------------------------|------------------------|----------------------|-----------|-------------------------------|--|---|
| <i>Abronia umbellata</i> ssp. <i>breviflora</i>         | pink sand-verbena                | None                   | None                 | 1B.1      | BLM-Sensitive                 | Coastal dunes and coastal strand.  | Foredunes and interdunes with sparse cover. <i>A. umb. breviflora</i> is usually the plant closest to the ocean. 0-12m. |
| <i>Horkelia hendersonii</i>                             | Henderson's horkelia             | None                   | None                 | 1B.1      | BLM-Sensitive; USFS-Sensitive | Upper montane coniferous forest.   | Granitic peaks and talus slopes at high elevations. 2000-2300m.   |
| <i>Clarkia concinna</i> ssp. <i>raichei</i>             | Raiche's red ribbons             | None                   | None                 | 1B.1      |                               | Coastal bluff scrub.   | Highly exposed rocky bluffs with a near-vertical slope. 15m.  |
| <i>Lilium maritimum</i>                                 | coast lily                       | None                   | None                 | 1B.1      |                               | Closed-cone coniferous forest, coastal prairie, coastal scrub, broadleaved upland forest, North Coast coniferous forest. | Historically in sandy soil, often on raised hummocks or bogs; today mostly in roadside ditches. 10-335m.                |
| <i>Atriplex minuscula</i>                               | lesser saltscale                 | None                   | None                 | 1B.1      |                               | Chenopod scrub, playas, valley and foothill grassland.   | In alkali sink and grassland in sandy, alkaline soils. 20-100m.   |
| <i>Corethrogyne filaginifolia</i> var. <i>linifolia</i> | Del Mar Mesa sand aster          | None                   | None                 | 1B.1      |                               | Chaparral, coastal scrub.  | In coastal, shrubby communities on maritime sediments and conglomerates. 30-150m.                                       |
| <i>Dudleya densiflora</i>                               | San Gabriel Mountains dudleya    | None                   | None                 | 1B.1      | USFS-Sensitive                | Chaparral, coastal scrub, lower montane coniferous forest.   | In crevices and on decomposed granite on cliffs and canyon walls. 300-520m.   |
| <i>Monardella douglasii</i> ssp. <i>venosa</i>          | veiny monardella                 | None                   | None                 | 1B.1      | BLM-Sensitive                 | Valley and foothill grassland, cismontane woodland.  | In heavy clay; mostly with grassland associates. Rediscovered in 1992. 60-410m.   |
| <i>Allium marvinii</i>                                  | Yucaipa onion                    | None                   | None                 | 1B.1      | USFS-Sensitive                | Chaparral.   | In openings on clay soils. 760-1065m.   |
| <i>Draba asterophora</i> var. <i>macrocarpa</i>         | Cup Lake draba                   | None                   | None                 | 1B.1      | USFS-Sensitive                | Subalpine coniferous forest.   | In relatively deep soil in the shade of granitic rocks. 2600-2670m.   |
| <i>Ericameria fasciculata</i>                           | Eastwood's goldenbush            | None                   | None                 | 1B.1      | BLM-Sensitive                 | Closed-cone coniferous forest, chaparral (maritime), coastal scrub, coastal dunes.                                       | In sandy openings. 30-275m.   |
| <i>Eschscholzia lemmonii</i> ssp. <i>kernensis</i>      | Tejon poppy                      | None                   | None                 | 1B.1      |                               | Valley and foothill grassland.   | Little information available on habitat. 250-750m.  |
| <i>Bloomeria clevelandii</i>                            | San Diego goldenstar             | None                   | None                 | 1B.1      | BLM-Sensitive                 | Chaparral, coastal scrub, valley and foothill grassland, vernal pools.   | Mesa grasslands, scrub edges; clay soils. Often on mounds between vernal pools in fine, sandy loam. 50-1090m.           |
| <i>Trifolium buckwestiorum</i>                          | Santa Cruz clover                | None                   | None                 | 1B.1      | BLM-Sensitive                 | Coastal prairie, broadleaved upland forest, cismontane woodland.   | Moist grassland. 60-545m.   |
| <i>Lotus rubriflorus</i>                                | red-flowered bird's-foot-trefoil | None                   | None                 | 1B.1      | BLM-Sensitive                 | Valley and foothill grassland, cismontane woodland.  | Most recent sighting from sterile, red soils-volcanic mudflow deposits. 200-425m.                                       |
| <i>Corethrogyne filaginifolia</i> var. <i>incana</i>    | San Diego sand aster             | None                   | None                 | 1B.1      |                               | Coastal scrub, coastal bluff scrub, chaparral.   | Most sites are disturbed, so hard to tell: possibly in disturbed sites and ecotones. 3-115m.                            |
| <i>Hesperolinon</i> sp. nov. "serpentinum"              | Napa western flax                | None                   | None                 | 1B.1      | BLM-Sensitive                 | Chaparral.   | Mostly found in serpentine chaparral. 225-850m.   |
| <i>Madia radiata</i>                                    | showy golden madia               | None                   | None                 | 1B.1      | BLM-Sensitive                 | Valley and foothill grassland, cismontane woodland, chenopod scrub.  | Mostly on adobe clay in grassland or among shrubs. 25-1125m.  |
| <i>Calochortus excavatus</i>                            | Inyo County star-tulip           | None                   | None                 | 1B.1      | BLM-Sensitive; USFS-Sensitive | Chenopod scrub, meadows (alkaline).  | Mostly on fine, sandy loam soils with alkaline salts, grassy meadows in shadscale scrub. 1150-2000m.                    |
| <i>Arabis constancei</i>                                | Constance's rock-cress           | None                   | None                 | 1B.1      | USFS-Sensitive                | Chaparral, lower montane coniferous forest.  | Mostly on open, bare, serpentine slopes and outcrops in chaparral and woodland. 975-2025m.                              |
| <i>Clarkia tembloriensis</i> ssp. <i>calientensis</i>   | Vasek's clarkia                  | None                   | None                 | 1B.1      | BLM-Sensitive                 | Valley and foothill grassland.   | North-facing slopes with Isomeris, other <i>Clarkia</i> spp. 270-335m.  |
| <i>Horkelia cuneata</i> ssp. <i>sericea</i>             | Kellogg's horkelia               | None                   | None                 | 1B.1      | USFS-Sensitive                | Closed-cone coniferous forest, coastal scrub, chaparral.   | Old dunes, coastal sandhills; openings. 10-200m.  |
| <i>Echinocereus engelmannii</i> var. <i>howei</i>       | Howe's hedgehog cactus           | None                   | None                 | 1B.1      | BLM-Sensitive                 | Mojavean desert scrub.   | On desert hills and flats on well-drained rocky ledges and steep gravelly slopes. 500-770m.                             |
| <i>Cryptantha ganderi</i>                               | Gander's cryptantha              | None                   | None                 | 1B.1      | BLM-Sensitive                 | Sonoran desert scrub, desert dunes.  | On dunes and in washes. 170-400m.   |
| <i>Ericameria palmeri</i> var. <i>palmeri</i>           | Palmer's goldenbush              | None                   | None                 | 1B.1      | BLM-Sensitive                 | Coastal scrub, chaparral.  | On granitic soils, on steep hillsides. Mesic sites. 30-600m.  |
| <i>Horkelia wilderae</i>                                | Barton Flats horkelia            | None                   | None                 | 1B.1      | USFS-Sensitive                | Lower montane coniferous forest, upper montane coniferous forest, chaparral.   | On rocky, north aspects in openings that hold persistent snowdrifts. 1675-2925m.  |
| <i>Lotus nuttallianus</i>                               | Nuttall's lotus                  | None                   | None                 | 1B.1      |                               | Coastal dunes, coastal scrub.  | On sand dunes; plants are threatened by encroachment of exotics. 0-10m.   |
| <i>Layia discoidea</i>                                  | rayless layia                    | None                   | None                 | 1B.1      | BLM-Sensitive                 | Chaparral, cismontane woodland, lower montane coniferous forest.   | On serpentine alluvium and serpentine talus. 785-1585m.   |
| <i>Eriogonum kennedyi</i> var. <i>pinicola</i>          | Kern buckwheat                   | None                   | None                 | 1B.1      | BLM-Sensitive                 | Chaparral, pinyon and juniper woodland.  | Open places on clay soil. 1400-1890m.   |
| <i>Astragalus deanei</i>                                | Dean's milk-vetch                | None                   | None                 | 1B.1      | BLM-Sensitive; USFS-Sensitive | Chaparral, coastal scrub, riparian forest.   | Open, brushy south-facing slopes in Diegan coastal sage, sometimes on recently burned-over hillsides. 75-670m.          |

Table J-2b. Plant Species Considered in this EIR (Upland species)

| Scientific Name   | Common name                    | Federal listing status | Calif listing status | CNPS List | Other Status                  | General Habitat   | Micro-Habitat  |
|---|--------------------------------|------------------------|----------------------|-----------|-------------------------------|---|--|
| <i>Calycadenia villosa</i>                                  | dwarf calycadenia              | None                   | None                 | 1B.1      | BLM-Sensitive; USFS-Sensitive | Chaparral, cismontane woodland, valley and foothill grassland, meadows and seeps.     | Open, dry meadows, hillsides, gravelly outwashes. 215-1275m.   |
| <i>Meconella oregana</i>                                    | Oregon meconella               | None                   | None                 | 1B.1      |                               | Coastal prairie, coastal scrub.   | Open, moist places. 250-500m.  |
| <i>Dudleya blochmaniae</i> ssp. <i>blochmaniae</i>          | Blochman's dudleya             | None                   | None                 | 1B.1      |                               | Coastal scrub, coastal bluff scrub, valley and foothill grassland.                    | Open, rocky slopes; often in shallow clays over serpentine or in rocky areas w/little soil. 5-450m.          |
| <i>Pentachaeta aurea</i> ssp. <i>allenii</i>                | Allen's pentachaeta            | None                   | None                 | 1B.1      |                               | Valley and foothill grasslands, coastal scrub.  | Openings in scrub or grassland.  |
| <i>Navarretia ojaiensis</i>                                 | Ojai navarretia                | None                   | None                 | 1B.1      |                               | Chaparral, coastal scrub, valley and foothill grassland.                              | Openings in shrublands or grasslands. 275-620m.  |
| <i>Sisyrinchium hitchcockii</i>                             | Hitchcock's blue-eyed grass    | None                   | None                 | 1B.1      |                               | Cismontane woodland, valley and foothill grassland.                                   | Openings in woodland or in grassland. 305 m in California.   |
| <i>Eriogonum nudum</i> var. <i>decurrens</i>                | Ben Lomond buckwheat           | None                   | None                 | 1B.1      |                               | Chaparral, cismontane woodland, lower montane coniferous forest.                      | Ponderosa pine sandhills in Santa Cruz County. 50-800m.  |
| <i>Fritillaria biflora</i> var. <i>ineziana</i>             | Hillsborough chocolate lily    | None                   | None                 | 1B.1      |                               | Cismontane woodland, valley and foothill grassland.                                   | Probably on serpentine; most recent site is in serpentine grassland. 90-160m.                                |
| <i>Navarretia setiloba</i>                                  | Plute Mountains navarretia     | None                   | None                 | 1B.1      | BLM-Sensitive; USFS-Sensitive | Cismontane woodland, pinyon-juniper woodland, valley and foothill grassland.          | Red clay soils, other clay soils (?), or on gravelly loam. 300-1110m.  |
| <i>Deinandra halliana</i>                                   | Hall's tarplant                | None                   | None                 | 1B.1      | BLM-Sensitive                 | Cismontane woodland, chenopod scrub, valley and foothill grassland.                   | Reported from a variety of substrates incl. clay, sand, and alkaline soils. 300-950m.                        |
| <i>Sidalcea hickmanii</i> ssp. <i>napensis</i>              | Napa checkerbloom              | None                   | None                 | 1B.1      |                               | Chaparral.  | Rhyolitic substrates. 415-610m.  |
| <i>Phacelia monoensis</i>                                   | Mono County phacelia           | None                   | None                 | 1B.1      | BLM-Sensitive; USFS-Sensitive | Great Basin scrub, pinyon and juniper woodland, meadows and seeps.                    | Ridgetops in alkaline mountain meadows in clay soils; also roadsides. 1900-2900m.                            |
| <i>Gilia capitata</i> ssp. <i>tomentosa</i>                 | woolly-headed gilia            | None                   | None                 | 1B.1      |                               | Coastal bluff scrub.  | Rocky outcrops on the coast. 15-155m.  |
| <i>Sedum oblanceolatum</i>                                  | Applegate stonecrop            | None                   | None                 | 1B.1      |                               | Upper montane coniferous forest.  | Rocky sites. 400-2000m.  |
| <i>Abronia villosa</i> var. <i>aurita</i>                   | chaparral sand-verbena         | None                   | None                 | 1B.1      | BLM-Sensitive; USFS-Sensitive | Chaparral, coastal scrub  | Sandy areas. 80-1600m.   |
| <i>Lavatera assurgentiflora</i> ssp. <i>assurgentiflora</i> | island mallow                  | None                   | None                 | 1B.1      |                               | Coastal bluff scrub, coastal scrub.   | Sandy flats and rocky places. Mainland and Todos Santos Island plants probably planted. 15-245m.             |
| <i>Calyptridium parryi</i> var. <i>hesseae</i>              | Santa Cruz Mountains pussypaws | None                   | None                 | 1B.1      | BLM-Sensitive                 | Chaparral, cismontane woodland.   | Sandy or gravelly openings. 305-1530m.   |
| <i>Horkelia cuneata</i> ssp. <i>puberula</i>                | mesa horkelia                  | None                   | None                 | 1B.1      | USFS-Sensitive                | Chaparral, cismontane woodland, coastal scrub.  | Sandy or gravelly sites. 70-810m.  |
| <i>Heterotheca sessiliflora</i> ssp. <i>sessiliflora</i>    | beach goldenaster              | None                   | None                 | 1B.1      |                               | Coastal dunes, coastal scrub, chaparral (coastal).                                    | Sandy sites. 0-1224m.  |
| <i>Eriogonum evanidum</i>                                   | vanishing wild buckwheat       | None                   | None                 | 1B.1      | USFS-Sensitive                | Chaparral, lower montane coniferous forest, pinyon and juniper woodland.              | Sandy sites. 970-2200m.  |
| <i>Chaenactis glabriuscula</i> var. <i>orcuttiana</i>       | Orcutt's pincushion            | None                   | None                 | 1B.1      |                               | Coastal bluff scrub, coastal dunes.   | Sandy sites. 3-100m.   |
| <i>Ancistrocarphus kelii</i>                                | Santa Ynez groundstar          | None                   | None                 | 1B.1      | BLM-Sensitive                 | Chaparral, cismontane woodland.   | Sandy soils. 40-130m.  |
| <i>Oenothera wolfii</i>                                     | Wolf's evening-primrose        | None                   | None                 | 1B.1      | BLM-Sensitive                 | Coastal bluff scrub, coastal dunes, coastal prairie, lower montane coniferous forest. | Sandy substrates; usually mesic sites. 3-800m.   |
| <i>Eriogonum umbellatum</i> var. <i>lautum</i>              | Scott Valley buckwheat         | None                   | None                 | 1B.1      |                               | Cismontane (oak) woodlands, lower montane coniferous forest.                          | Sandy to gravelly flats. 800-900m.   |
| <i>Stylocline masonii</i>                                   | Mason's neststraw              | None                   | None                 | 1B.1      | BLM-Sensitive                 | Chenopod scrub, pinyon-juniper woodland.  | Sandy washes. 100-1200m.   |
| <i>Mimulus fremontii</i> var. <i>vandenbergensis</i>        | Vandenberg monkeyflower        | None                   | None                 | 1B.1      |                               | Cismontane woodland, chaparral (Burton Mesa).   | Sandy, often disturbed areas. 75-120m.   |
| <i>Harmonia doris-nilesiae</i>                              | Niles' harmonia                | None                   | None                 | 1B.1      | BLM-Sensitive; USFS-Sensitive | Lower montane coniferous forest, chaparral, cismontane woodland.                      | Serpentine barrens. 650-1660m.   |
| <i>Cryptantha clevelandii</i> var. <i>dissita</i>           | serpentine cryptantha          | None                   | None                 | 1B.1      | BLM-Sensitive                 | Chaparral.  | Serpentine outcrops. 330-730m.   |
| <i>Hoita strobilina</i>                                     | Loma Prieta hoita              | None                   | None                 | 1B.1      |                               | Chaparral, cismontane woodland, riparian woodland.                                    | Serpentine; mesic sites.   |
| <i>Lewisia serrata</i>                                      | saw-toothed lewisia            | None                   | None                 | 1B.1      | USFS-Sensitive                | Broadleaved upland forest, lower montane coniferous forest, riparian forest.          | Shaded, north-facing moss-covered, metamorphic rock cliffs. 900-1435m.                                       |
| <i>Phacelia argentea</i>                                    | sand dune phacelia             | None                   | None                 | 1B.1      |                               | Coastal dunes.  | Stabilized and recently moving sand dunes. 3-25m.  |
| <i>Astragalus tener</i> var. <i>ferrisiae</i>               | Ferris' milk-vetch             | None                   | None                 | 1B.1      | BLM-Sensitive                 | Meadows, valley and foothill grassland.   | Subalkaline flats on overflow land in the Central Valley; usually seen in dry, adobe soil. 5-75m.            |
| <i>Lomatium stebbinsii</i>                                  | Stebbins' lomatium             | None                   | None                 | 1B.1      | USFS-Sensitive                | Lower montane coniferous forest, chaparral.   | Thin, gravelly volcanic clay in open yellow pine forest. Grows where other vegetation is absent. 1235-1850m. |
| <i>Clarkia mosquinii</i>                                    | Mosquin's clarkia              | None                   | None                 | 1B.1      | BLM-Sensitive; USFS-Sensitive | Cismontane woodland, lower montane coniferous forest.                                 | Usually on steep, rocky cutbanks and slopes. 185-1170m.  |

Table J-2b. Plant Species Considered in this EIR (Upland species)

| Scientific Name                                       | Common name                         | Federal listing status | Calif listing status | CNPS List | Other Status                  | General Habitat   | Micro-Habitat  |
|---|-------------------------------------|------------------------|----------------------|-----------|-------------------------------|---|--|
| <i>Juncus leiospermus</i> var. <i>leiospermus</i>     | Red Bluff dwarf rush                | None                   | None                 | 1B.1      | BLM-Sensitive; USFS-Sensitive | Chaparral, valley and foothill grassland, cismontane woodlands, vernal pools.                     | Vernally mesic sites. Sometimes on edges of vernal pools. 30-1020m.                        |
| <i>Nemacaulis denudata</i> var. <i>denudata</i>       | coast woolly-heads                  | None                   | None                 | 1B.2      |                               | Coastal dunes.  | 0-100m.  |
| <i>Silene occidentalis</i> ssp. <i>longistipitata</i> | long-stiped campion                 | None                   | None                 | 1B.2      | BLM-Sensitive; USFS-Sensitive | Chaparral, lower montane coniferous forest, upper montane coniferous forest.                      | 1000-2000m.  |
| <i>Eriogonum grande</i> var. <i>rubescens</i>         | red-flowered buckwheat              | None                   | None                 | 1B.2      |                               | Coastal bluff scrub, coastal scrub, chaparral.  | 10-165m.   |
| <i>Castilleja densiflora</i> ssp. <i>obispoensis</i>  | San Luis Obispo owl's-clover        | None                   | None                 | 1B.2      | BLM-Sensitive                 | Valley and foothill grassland.  | 10-215m.   |
| <i>Brodiaea californica</i> var. <i>leptandra</i>     | narrow-anthered California brodiaea | None                   | None                 | 1B.2      |                               | Broadleaved upland forest, chaparral, lower montane coniferous forest.                            | 110-915m.  |
| <i>Lupinus elmeri</i>                                 | South Fork Mtn. lupine              | None                   | None                 | 1B.2      |                               | Lower montane coniferous forest.  | 1370-2000m.  |
| <i>Arabis hirshbergiae</i>                            | Hirshberg's rock-cress              | None                   | None                 | 1B.2      |                               | Pebble (or pavement) plains.  | 1400m.   |
| <i>Calystegia purpurata</i> ssp. <i>saxicola</i>      | coastal bluff morning-glory         | None                   | None                 | 1B.2      |                               | Coastal dunes, coastal scrub.   | 15-105m.   |
| <i>Sidalcea malviflora</i> ssp. <i>purpurea</i>       | purple-stemmed checkerbloom         | None                   | None                 | 1B.2      |                               | Broadleaved upland forest, coastal prairie.   | 15-65m.  |
| <i>Eriastrum harwoodii</i>                            | Harwood's eriastrum                 | None                   | None                 | 1B.2      | BLM-Sensitive                 | Desert dunes.   | 200-915m.  |
| <i>Gilia millefoliata</i>                             | dark-eyed gilia                     | None                   | None                 | 1B.2      | BLM-Sensitive                 | Coastal dunes.  | 2-20m.   |
| <i>Rosa pinetorum</i>                                 | pine rose                           | None                   | None                 | 1B.2      |                               | Closed-cone coniferous forest.  | 2-300m.  |
| <i>Clarkia delicata</i>                               | delicate clarkia                    | None                   | None                 | 1B.2      | USFS-Sensitive                | Cismontane woodland, chaparral.   | 235-1000m.   |
| <i>Chorizanthe xanti</i> var. <i>leucotheca</i>       | white-bracted spineflower           | None                   | None                 | 1B.2      |                               | Mojavean desert scrub, pinyon-juniper woodland.   | 300-1200m.   |
| <i>Deinandra increscens</i> ssp. <i>foliosa</i>       | leafy tarplant                      | None                   | None                 | 1B.2      |                               | Valley and foothill grassland.  | 300-500m.  |
| <i>Aristocapsa insignis</i>                           | Indian Valley spineflower           | None                   | None                 | 1B.2      | BLM-Sensitive                 | Cismontane woodland.  | 300-600m.  |
| <i>Lonicera subspicata</i> var. <i>subspicata</i>     | Santa Barbara honeysuckle           | None                   | None                 | 1B.2      | USFS-Sensitive                | Chaparral, cismontane woodland, coastal scrub.  | 35-1000m.  |
| <i>Atriplex erecticaulis</i>                          | Earlmarc orache                     | None                   | None                 | 1B.2      | BLM-Sensitive                 | Valley and foothill grassland.  | 40-100m.   |
| <i>Clarkia jolonensis</i>                             | Jolon clarkia                       | None                   | None                 | 1B.2      | USFS-Sensitive                | Cismontane woodland.  | 500m.  |
| <i>Amsinckia lunaris</i>                              | bent-flowered fiddleneck            | None                   | None                 | 1B.2      | BLM-Sensitive                 | Cismontane woodland, valley and foothill grassland.   | 50-500m.   |
| <i>Galium catalinense</i> ssp. <i>catalinense</i>     | Santa Catalina Island bedstraw      | None                   | None                 | 1B.2      |                               | Chaparral, coastal scrub.   | 5-300m.  |
| <i>Microseris paludosa</i>                            | marsh microseris                    | None                   | None                 | 1B.2      |                               | Closed-cone coniferous forest, cismontane woodland, coastal scrub, valley and foothill grassland. | 5-300m.  |
| <i>Gilia capitata</i> ssp. <i>pacifica</i>            | Pacific gilia                       | None                   | None                 | 1B.2      |                               | Coastal bluff scrub, coastal prairie, valley and foothill grassland.                              | 5-300m.  |
| <i>Dissanthelium californicum</i>                     | California dissanthelium            | None                   | None                 | 1B.2      |                               | Coastal scrub.  | 5-500m.  |
| <i>Lepechinia cardiophylla</i>                        | heart-leaved pitcher sage           | None                   | None                 | 1B.2      | USFS-Sensitive                | Closed-cone coniferous forest, chaparral, cismontane woodland.                                    | 550-1370m.   |
| <i>Lasthenia californica</i> ssp. <i>macrantha</i>    | perennial goldfields                | None                   | None                 | 1B.2      |                               | Coastal bluff scrub, coastal dunes, coastal scrub.  | 5-520m.  |
| <i>Iris hartwegii</i> ssp. <i>columbiana</i>          | Tuolumne iris                       | None                   | None                 | 1B.2      | USFS-Sensitive                | Cismontane woodland, lower montane coniferous forest.   | 600-1400m.   |
| <i>Malacothrix foliosa</i> ssp. <i>philbrickii</i>    | Philbrick's malacothrix             | None                   | None                 | 1B.2      |                               | Coastal scrub.  | 60-100m.   |
| <i>Calystegia subacaulis</i> ssp. <i>episcopalis</i>  | Cambria morning-glory               | None                   | None                 | 1B.2      | USFS-Sensitive                | Chaparral, cismontane woodland.   | 60-500m.   |
| <i>Caulanthus coulteri</i> var. <i>lemmonii</i>       | Lemmon's jewelflower                | None                   | None                 | 1B.2      | BLM-Sensitive; USFS-Sensitive | Pinyon-juniper woodland, valley and foothill grassland.   | 80-1220m.  |
| <i>Phacelia phacelloides</i>                          | Mt. Diablo phacelia                 | None                   | None                 | 1B.2      | BLM-Sensitive                 | Chaparral, cismontane woodland.   | Adjacent to trails, on rock outcrops and talus slopes; sometimes on serpentine. 500-1370m. |
| <i>Phacelia ciliata</i> var. <i>opaca</i>             | Merced phacelia                     | None                   | None                 | 1B.2      |                               | Valley and foothill grassland.  | Adobe or clay soils of valley floors, open hills, or alkaline flats. 60-150m.              |
| <i>Lepidium jaredii</i> ssp. <i>album</i>             | Panoche pepper-grass                | None                   | None                 | 1B.2      | BLM-Sensitive                 | Valley and foothill grassland.  | Alkali bottoms, slopes, washes, alluvial fans; clay and gypsum-rich soils. 65-910m.        |
| <i>Lepidium jaredii</i> ssp. <i>jaredii</i>           | Jared's pepper-grass                | None                   | None                 | 1B.2      | BLM-Sensitive                 | Valley and foothill grassland.  | Alkali flats and sinks. Sandy, alkaline, sometimes adobe soils.                            |

**Table J-2b. Plant Species Considered in this EIR (Upland species)**

| Scientific Name                                       | Common name                   | Federal listing status | Calif listing status | CNPS List | Other Status                  | General Habitat  | Micro-Habitat   |
|---|-------------------------------|------------------------|----------------------|-----------|-------------------------------|--|---|
| <i>Atriplex pacifica</i>                              | South Coast saltscale         | None                   | None                 | 1B.2      |                               | Coastal scrub, coastal bluff scrub, playas, chenopod scrub.  | Alkali soils. 1-500m.   |
| <i>Atriplex cordulata</i>                             | heartscale                    | None                   | None                 | 1B.2      | BLM-Sensitive                 | Chenopod scrub, valley and foothill grassland, meadows.  | Alkaline flats and scalds in the Central Valley, sandy soils. 1-150(600)m.  |
| <i>Calochortus striatus</i>                           | alkali mariposa-lily          | None                   | None                 | 1B.2      | BLM-Sensitive; USFS-Sensitive | Chaparral, chenopod scrub, Mojavean desert scrub, meadows.   | Alkaline meadows and ephemeral washes. 90-1595m.  |
| <i>Atriplex serenana</i> var. <i>dauidsonii</i>       | Davidson's saltscale          | None                   | None                 | 1B.2      |                               | Coastal bluff scrub, coastal scrub.  | Alkaline soil. 3-250m.  |
| <i>Centromadia parryi</i> ssp. <i>congdonii</i>       | Congdon's tarplant            | None                   | None                 | 1B.2      | BLM-Sensitive                 | Valley and foothill grassland.   | Alkaline soils, sometimes described as heavy white clay. 1-230m.  |
| <i>Streptanthus cordatus</i> var. <i>plutensis</i>    | Piute Mountains jewel-flower  | None                   | None                 | 1B.2      | BLM-Sensitive; USFS-Sensitive | Broadleaved upland forests, closed-cone coniferous forest, pinyon-juniper woodland.  | Along roadbanks and cliffs, metamorphic-red clay soils. 1095-1735m.   |
| <i>Phacelia stebbinsii</i>                            | Stebbins' phacelia            | None                   | None                 | 1B.2      | USFS-Sensitive                | Lower montane coniferous forest, cismontane woodland, meadows and seeps, riparian woodland.                                | Among rocks and rubble on metamorphic rock benches. 605-2050m.  |
| <i>Ribes viburnifolium</i>                            | Santa Catalina Island currant | None                   | None                 | 1B.2      |                               | Chaparral.   | Among shrubs in canyons. 30-300m.   |
| <i>Navarretia nigelliformis</i> ssp. <i>radians</i>   | shining navarretia            | None                   | None                 | 1B.2      | BLM-Sensitive                 | Cismontane woodland, valley and foothill grassland, vernal pools.  | Apparently in grassland, and not necessarily in vernal pools. 200-1000m.  |
| <i>Xylorhiza orcuttii</i>                             | Orcutt's woody-aster          | None                   | None                 | 1B.2      | BLM-Sensitive                 | Sonoran desert scrub.  | Arid canyons; often in washes. 265-365m.  |
| <i>Phacelia greenei</i>                               | Scott Valley phacelia         | None                   | None                 | 1B.2      | BLM-Sensitive; USFS-Sensitive | Closed-cone coniferous forest, lower montane coniferous forest, subalpine coniferous forest, upper montane conifer forest. | Bare serpentine ridges and openings in yellow pine and red fir forest communities. 800-2440m.                         |
| <i>Eriogonum temblorense</i>                          | Temblor buckwheat             | None                   | None                 | 1B.2      | BLM-Sensitive                 | Valley and foothill grassland.   | Barren clay or sandstone substrates. 300-1000m.   |
| <i>Layia jonesii</i>                                  | Jones' layia                  | None                   | None                 | 1B.2      | BLM-Sensitive; USFS-Sensitive | Chaparral, valley and foothill grassland.  | Clay soils and serpentine outcrops. 5-155m.   |
| <i>Astragalus didymocarpus</i> var. <i>milesianus</i> | Miles' milk-vetch             | None                   | None                 | 1B.2      |                               | Coastal scrub.   | Clay soils. 20-90m.   |
| <i>Allium peninsulare</i> var. <i>franciscanum</i>    | Franciscan onion              | None                   | None                 | 1B.2      |                               | Cismontane woodland, valley and foothill grassland.  | Clay soils; often on serpentine. dry hillsides. 100-300m.   |
| <i>Chorizanthe cuspidata</i> var. <i>cuspidata</i>    | San Francisco Bay spineflower | None                   | None                 | 1B.2      |                               | Coastal bluff scrub, coastal dunes, coastal prairie, coastal scrub.  | Closely related to <i>C. pungens</i> . Sandy soil on terraces and slopes. 5-550m.                                     |
| <i>Piperia candida</i>                                | white-flowered rein orchid    | None                   | None                 | 1B.2      | BLM-Sensitive                 | North coast coniferous forest, lower montane coniferous forest, broadleaved upland forest.                                 | Coast ranges from Santa Cruz County north; on serpentine. Forest duff, mossy banks, rock outcrops & muskeg. 0-1200m.  |
| <i>Salvia brandegeei</i>                              | Brandegee's sage              | None                   | None                 | 1B.2      |                               | Closed-cone coniferous forest, chaparral, coastal scrub.   | Coastal bluffs and seaward canyons. 5-200m.   |
| <i>Astragalus rattanii</i> var. <i>jepsonianus</i>    | Jepson's milk-vetch           | None                   | None                 | 1B.2      | BLM-Sensitive                 | Cismontane woodland, valley and foothill grassland, chaparral.   | Commonly on serpentine in grassland or openings in chaparral. 320-700m.   |
| <i>Camissonia hardhamiae</i>                          | Hardham's evening-primrose    | None                   | None                 | 1B.2      | BLM-Sensitive; USFS-Sensitive | Chaparral, cismontane woodland.  | Decomposed carbonate. 330-500m.   |
| <i>Mimulus gracilipes</i>                             | slender-stalked monkeyflower  | None                   | None                 | 1B.2      | BLM-Sensitive; USFS-Sensitive | Chaparral.   | Disturbed places such as burns and RR grades; also on thin granitic soil in cracks in large granite rocks. 500-1300m. |
| <i>Phacelia novemmillensis</i>                        | Nine Mile Canyon phacelia     | None                   | None                 | 1B.2      | BLM-Sensitive; USFS-Sensitive | Broadleaved upland forest, pinyon and juniper woodland, upper montane coniferous forest, cismontane woodland.              | Dry disturbed banks, granitic or metamorphic soils. 1635-2530m.   |
| <i>Astragalus leucolobus</i>                          | Big Bear Valley woollypod     | None                   | None                 | 1B.2      |                               | Lower montane coniferous forest, pebble plain, pinyon and juniper woodland, upper montane coniferous forest.               | Dry pine woods, gravelly knolls among sagebrush, or stony lake shores in the pine belt. (425)1670-2515m.              |
| <i>Linanthus jaegeri</i>                              | San Jacinto linanthus         | None                   | None                 | 1B.2      | USFS-Sensitive                | Subalpine coniferous forest, upper montane coniferous forest.  | Dry rocky granitic outcrops; sheer, vertical habitat. 1815-3050m.   |
| <i>Malacothamnus palmeri</i> var. <i>palmeri</i>      | Santa Lucia bush-mallow       | None                   | None                 | 1B.2      | USFS-Sensitive                | Chaparral.   | Dry rocky slopes, mostly near summits, but occasionally extending down canyons to the sea. 60-365m.                   |
| <i>Linanthus concinnus</i>                            | San Gabriel linanthus         | None                   | None                 | 1B.2      | USFS-Sensitive                | Lower montane coniferous forest, upper montane coniferous forest.  | Dry rocky slopes, often in Jeffrey pine/canyon oak forest. 1575-2545m.  |
| <i>Eriogonum nudum</i> var. <i>murinum</i>            | mouse buckwheat               | None                   | None                 | 1B.2      | BLM-Sensitive                 | Chaparral, cismontane woodland, valley and foothill grassland.   | Dry sandy loam slopes in the Kaweah River drainage. 360-1130m.  |
| <i>Mimulus mohavensis</i>                             | Mojave monkeyflower           | None                   | None                 | 1B.2      | BLM-Sensitive                 | Joshua tree woodland, Mojavean desert scrub.   | Dry sandy or rocky washes along the Mojave River. 600-1175m.  |

**Table J-2b. Plant Species Considered in this EIR (Upland species)**

| Scientific Name  | Common name                 | Federal listing status | Calif listing status | CNPS List | Other Status                  | General Habitat  | Micro-Habitat  |
|--|-----------------------------|------------------------|----------------------|-----------|-------------------------------|--|--|
| <i>Eriogonum nervulosum</i>                            | Snow Mountain buckwheat     | None                   | None                 | 1B.2      | BLM-Sensitive; USFS-Sensitive | Chaparral.   | Dry serpentine outcrops, balds, and barrens. 300-2100m.  |
| <i>Streptanthus howellii</i>                           | Howell's jewel-flower       | None                   | None                 | 1B.2      | USFS-Sensitive                | Lower montane coniferous forest.   | Dry serpentine slopes, in open pine woods or in brushy areas; on rocky soil. 300-1500m.  |
| <i>Leptosiphon serrulatus</i>                          | Madera leptosiphon          | None                   | None                 | 1B.2      | USFS-Sensitive                | Cismontane woodland, lower montane coniferous forest.                                      | Dry slopes; often on decomposed granite in woodland. 80-1575m.   |
| <i>Lepidium virginicum</i> var. <i>robinsonii</i>      | Robinson's pepper-grass     | None                   | None                 | 1B.2      |                               | Chaparral, coastal scrub.  | Dry soils, shrubland. 1-945m.  |
| <i>Eriogonum prociduum</i>                             | prostrate buckwheat         | None                   | None                 | 1B.2      | BLM-Sensitive; USFS-Sensitive | Great Basin scrub, pinyon-juniper woodland, upper montane coniferous forest.               | Dry volcanic slopes and hills, (Jepson Manual says granite). 1300-2705m.   |
| <i>Clarkia gracilis</i> ssp. <i>albicaulis</i>         | white-stemmed clarkia       | None                   | None                 | 1B.2      | BLM-Sensitive; USFS-Sensitive | Chaparral, cismontane woodland.  | Dry, grassy openings in chaparral or foothill woodland. Sometimes on serpentine. 300-850m.   |
| <i>Astragalus lentiginosus</i> var. <i>kernensis</i>   | Kern Plateau milk-vetch     | None                   | None                 | 1B.2      | USFS-Sensitive                | Meadows, subalpine coniferous forest.  | Dry, gravelly or sandy slopes or flats. 2350-2600m.  |
| <i>Astragalus oophorus</i> var. <i>lavini</i>          | Lavin's milk-vetch          | None                   | None                 | 1B.2      | BLM-Sensitive                 | Great Basin scrub.   | Dry, open areas. 2450-3050m.   |
| <i>Calochortus weedii</i> var. <i>vestitus</i>         | late-flowered mariposa-lily | None                   | None                 | 1B.2      | USFS-Sensitive                | Chaparral, cismontane woodland.  | Dry, open coastal woodland, chaparral; on serpentine. 270-1910m.   |
| <i>Navarretia rosulata</i>                             | Marin County navarretia     | None                   | None                 | 1B.2      |                               | Closed-cone coniferous forest, chaparral.  | Dry, open rocky places; can occur on serpentine. 200-635m.   |
| <i>Calochortus weedii</i> var. <i>intermedius</i>      | intermediate mariposa-lily  | None                   | None                 | 1B.2      | USFS-Sensitive                | Coastal scrub, chaparral, valley and foothill grassland.                                   | Dry, rocky open slopes and rock outcrops. 120-850m.  |
| <i>Senecio cleavelandii</i> var. <i>heterophyllus</i>  | Red Hills ragwort           | None                   | None                 | 1B.2      | BLM-Sensitive                 | Cismontane woodland.   | Drying serpentine soils; often along streams. 255-385m.  |
| <i>Collinsia corymbosa</i>                             | round-headed Chinese-houses | None                   | None                 | 1B.2      |                               | Coastal dunes, coastal prairie.  | Dunes and coastal prairie. 10-30m.   |
| <i>Minuartia decumbens</i>                             | The lassics sandwort        | None                   | None                 | 1B.2      | USFS-Sensitive                | Lower montane coniferous forest, upper montane coniferous forest.                          | Endemic to serpentine, only known from upper, north-facing slopes under Jeffrey pines. 1500-1600m.   |
| <i>Cusickiella quadricostata</i>                       | Bodie Hills cusickiella     | None                   | None                 | 1B.2      | BLM-Sensitive                 | Great Basin scrub, pinyon-juniper woodland.  | Endemic to the Walker River drainage; mainly confined to the shallow decomposed granite or clay soils. 1985-2800m.                         |
| <i>Lewisia disepala</i>                                | Yosemite lewisia            | None                   | None                 | 1B.2      | USFS-Sensitive                | Lower montane coniferous forest, pinyon-juniper woodland, upper montane coniferous forest. | Fine gravel on rock outcrops, ridges, or domes. Granitic soils. 1560-2610m.  |
| <i>Grindelia hirsutula</i> var. <i>hallii</i>          | San Diego gumplant          | None                   | None                 | 1B.2      |                               | Meadows, valley and foothill grassland, chaparral, lower montane coniferous forest.        | Frequently occurs in low moist areas in meadows; assoc spp commonly incl <i>Wyethia</i> , <i>Ranunculus</i> , <i>Sidalcea</i> . 180-1660m. |
| <i>Chorizanthe polygonoides</i> var. <i>longispina</i> | long-spined spineflower     | None                   | None                 | 1B.2      | USFS-Sensitive                | Chaparral, coastal scrub, meadows, valley and foothill grassland.                          | Gabbroic clay. 30-1450m.   |
| <i>Arabis parishii</i>                                 | Parish's rock-cress         | None                   | None                 | 1B.2      | USFS-Sensitive                | Pebble plain, pinyon-juniper woodland, upper montane coniferous forest.                    | Generally found on pebble plains on clay soil w/quartzite cobbles; sometimes on limestone. 1770-2900m.                                     |
| <i>Galium serpticum</i> ssp. <i>scotticum</i>          | Scott Mountain bedstraw     | None                   | None                 | 1B.2      | BLM-Sensitive                 | Lower montane coniferous forest.   | Generally on N-facing slopes on serpentine in mixed conifer forest. 1000-2075m.  |
| <i>Eriogonum spectabile</i>                            | Barron's buckwheat          | None                   | None                 | 1B.2      | USFS-Sensitive                | Upper montane coniferous forest.   | Glaciated andesite, rocky or sandy sites. 2010-2025m.  |
| <i>Prunus eremophila</i>                               | Mojave Desert plum          | None                   | None                 | 1B.2      |                               | Mojavean desert scrub.   | Granitic or rhyolitic substrates; usually in washes. 975-1175m.  |
| <i>Hulsea brevifolia</i>                               | short-leaved hulsea         | None                   | None                 | 1B.2      | USFS-Sensitive                | Upper montane coniferous forest.   | Granitic or volcanic soil of forest openings and road cuts. 1500-2700m.  |
| <i>Malacothamnus aboriginum</i>                        | Indian Valley bush-mallow   | None                   | None                 | 1B.2      | BLM-Sensitive                 | Cismontane woodland, chaparral.  | Granitic outcrops and sandy bare soil, often in disturbed soils. 150-1700m.  |
| <i>Arabis johnstonii</i>                               | Johnston's rock-cress       | None                   | None                 | 1B.2      | USFS-Sensitive                | Chaparral, lower montane coniferous forest.  | Granitic soil with pleistocene, non-marine clay deposits. With <i>Adenostoma</i> , <i>Quercus wislizenii</i> . 1350-2150m.                 |
| <i>Phacelia nashiana</i>                               | Charlotte's phacelia        | None                   | None                 | 1B.2      | BLM-Sensitive                 | Joshua tree woodland, Mojavean desert scrub, pinyon-juniper woodland.                      | Granitic soils; sandy or rocky areas on steep slopes or flats. 600-2200m.  |
| <i>Pentachaeta exilis</i> ssp. <i>aeolica</i>          | San Benito pentachaeta      | None                   | None                 | 1B.2      | BLM-Sensitive; USFS-Sensitive | Cismontane woodland, valley and foothill grassland.  | Grassy areas. 635-855m.  |
| <i>Horkelia bolanderi</i>                              | Bolander's horkelia         | None                   | None                 | 1B.2      |                               | Lower montane coniferous forest, chaparral, meadows, valley and foothill grassland.        | Grassy margins of vernal pools and meadows. 450-850m.  |
| <i>Lessingia arachnoidea</i>                           | Crystal Springs lessingia   | None                   | None                 | 1B.2      |                               | Coastal sage scrub, valley and foothill grassland, cismontane woodland.                    | Grassy slopes on serpentine; sometimes on roadsides. 60-200m.  |
| <i>Hemizonia congesta</i> ssp. <i>congesta</i>         | seaside tarplant            | None                   | None                 | 1B.2      |                               | Coastal scrub, valley and foothill grassland.  | Grassy valleys and hills, often in fallow fields. 25-200m.   |

Table J-2b. Plant Species Considered in this EIR (Upland species)

| Scientific Name                       | Common name                       | Federal listing status | Calif listing status | CNPS List | Other Status                  | General Habitat   | Micro-Habitat  |
|---------------------------------------|-----------------------------------|------------------------|----------------------|-----------|-------------------------------|---|--|
| Malacothamnus palmeri var. lucianus   | Arroyo Seco bush-mallow           | None                   | None                 | 1B.2      | BLM-Sensitive; USFS-Sensitive | Chaparral, meadows and seeps.   | Gravel banks and sandstone rocks on west-facing slopes in full sun. 10-915m.   |
| Malacothamnus arcuatus                | arcuate bush-mallow               | None                   | None                 | 1B.2      |                               | Chaparral.  | Gravelly alluvium. 80-355m.  |
| Cordylanthus tenuis ssp. pallescens   | pallid bird's-beak                | None                   | None                 | 1B.2      | BLM-Sensitive; USFS-Sensitive | Lower montane coniferous forest.  | Gravelly openings in brush patches next to coniferous forest; on volcanic alluvium. 690-1600m.                         |
| Mimulus evanescens                    | ephemeral monkeyflower            | None                   | None                 | 1B.2      | BLM-Sensitive; USFS-Sensitive | Great Basin scrub, lower montane coniferous forest, pinyon-juniper woodland.  | Gravelly or rocky sites; vernal mesic. 1250-1700m.   |
| Galium glabrescens ssp. modocense     | Modoc bedstraw                    | None                   | None                 | 1B.2      | BLM-Sensitive; USFS-Sensitive | Great Basin scrub.  | Gravelly slopes and under the edges of rocks; sandy clay soil. 1575-2800m.   |
| Eucephalus vialis                     | wayside aster                     | None                   | None                 | 1B.2      | USFS-Sensitive                | Lower montane coniferous forest, upper montane coniferous forest.             | Gravelly substrates. 910-1545m.  |
| Cryptantha circumscissa var. rosulata | rosette cushion cryptantha        | None                   | None                 | 1B.2      |                               | Alpine boulder and rock fields, subalpine coniferous forests.                 | Gravelly, granitic substrates. 2950-3660m.   |
| Ivesia paniculata                     | Ash Creek ivesia                  | None                   | None                 | 1B.2      | BLM-Sensitive; USFS-Sensitive | Great Basin scrub, pinyon-juniper woodland, upper montane coniferous forest.  | Gravelly, shallow volcanic ash on barren ridges. 1500-1915m.   |
| Layia munzii                          | Munz's tidy-tips                  | None                   | None                 | 1B.2      | BLM-Sensitive                 | Chenopod scrub, valley and foothill grassland.                                | Hillsides, in white-grey alkaline clay soils, w/grasses and chenopod scrub associates. 45-760m.                        |
| Mimulus pictus                        | calico monkeyflower               | None                   | None                 | 1B.2      | BLM-Sensitive                 | Broadleafed upland forest, cismontane woodland.                               | In bare ground around gooseberry bushes or around granite rock outcrops. 100-1300m.                                    |
| Sphaeralcea rusbyi var. eremicola     | Rusby's desert-mallow             | None                   | None                 | 1B.2      | BLM-Sensitive                 | Mojavean desert scrub, Joshua tree woodland.                                  | In creosote bush scrub, blackbush scrub, Joshua tree woodland; sometimes on carbonate; sometimes in washes. 965-1500m. |
| Sedum albomarginatum                  | Feather River stonecrop           | None                   | None                 | 1B.2      | BLM-Sensitive; USFS-Sensitive | Chaparral, lower montane coniferous forest.                                   | In crevices and on ledges of serpentine outcrops and slopes. 300-1585m.  |
| Epilobium nivium                      | Snow Mountain willowherb          | None                   | None                 | 1B.2      | USFS-Sensitive                | Upper montane coniferous forest, chaparral.                                   | In crevices of rocky outcrops, and dry talus and shale slopes. 785-2500m.  |
| Enceliopsis covillei                  | Panamint daisy                    | None                   | None                 | 1B.2      | BLM-Sensitive                 | Mojavean desert scrub.  | In deposits of subalkaline, clayish soil on dry canyon floors or slopes. 400-1830m.                                    |
| Ribes menziesii var. ixoderme         | aromatic canyon gooseberry        | None                   | None                 | 1B.2      |                               | Chaparral, cismontane woodland.   | In forest openings. 610-1160m.   |
| Dudleya multicaulis                   | many-stemmed dudleya              | None                   | None                 | 1B.2      | BLM-Sensitive; USFS-Sensitive | Chaparral, coastal scrub, valley and foothill grassland.                      | In heavy, often clayey soils or grassy slopes. 0-790m.   |
| Baccharis plummerae ssp. glabrata     | San Simeon baccharis              | None                   | None                 | 1B.2      | USFS-Sensitive                | Coastal scrub.  | In open shrub-grassland associations. 90-375m.   |
| Ivesia argyrocoma                     | silver-haired ivesia              | None                   | None                 | 1B.2      | USFS-Sensitive                | Meadows, pebble plains, upper montane coniferous forest.                      | In pebble plains and meadows with other rare plants. 1480-2680m.   |
| Dudleya candelabrum                   | candleholder dudleya              | None                   | None                 | 1B.2      |                               | Coastal scrub.  | In rock walls and crevices, and on canyon sides. 4-535m.   |
| Dudleya variegata                     | variegated dudleya                | None                   | None                 | 1B.2      | BLM-Sensitive                 | Chaparral, coastal scrub, cismontane woodland, valley and foothill grassland. | In rocky or clay soils; sometimes associated with vernal pool margins. 3-550m.   |
| Camissonia sierrae ssp. alticola      | Mono Hot Springs evening-primrose | None                   | None                 | 1B.2      | USFS-Sensitive                | Upper montane coniferous forest.  | In sand or gravel over granite in mixed conifer forest; with Gayophytum, Collinsia, etc. 2120-2335m.                   |
| Cirsium fontinale var. campylon       | Mt. Hamilton fountain thistle     | None                   | None                 | 1B.2      | BLM-Sensitive                 | Cismontane woodland, chaparral, valley and foothill grassland.                | In seasonal and perennial drainages on serpentine. 95-890m.  |
| Lupinus sericatus                     | Cobb Mountain lupine              | None                   | None                 | 1B.2      | BLM-Sensitive                 | Chaparral, cismontane woodland, lower montane coniferous forest.              | In stands of knobcone pine-oak woodland, on open wooded slopes in gravelly soils; sometimes on serpentine. 180-1500m.  |
| Galium serpenticum ssp. warnerense    | Warner Mountains bedstraw         | None                   | None                 | 1B.2      | BLM-Sensitive; USFS-Sensitive | Subalpine coniferous forest, meadows.   | In talus or in rock crevices or at base of rocks. 1450-2750m.  |
| Delphinium californicum ssp. interius | Hospital Canyon larkspur          | None                   | None                 | 1B.2      |                               | Cismontane woodland, chaparral.   | In wet, boggy meadows, openings in chaparral and in canyons. 225-1060m.  |
| Calochortus clavatus var. avius       | Pleasant Valley mariposa-lily     | None                   | None                 | 1B.2      | BLM-Sensitive; USFS-Sensitive | Lower montane coniferous forest.  | Josephine silt loam and volcanically derived soil; often in rocky areas. 305-1700m.                                    |
| Trifolium jokerstii                   | Butte County golden clover        | None                   | None                 | 1B.2      | BLM-Sensitive                 | Valley and foothill grassland, vernal pools.                                  | Known only from 2 sites in Butte County in the vicinity of Table Mtn in grassland & swales near oak woodland. 50-385m. |
| Gilia yorkii                          | Monarch gilia                     | None                   | None                 | 1B.2      |                               | Chaparral, cismontane woodland.   | Limestone outcrops. 1290-1830m.  |

**Table J-2b. Plant Species Considered in this EIR (Upland species)**

| Scientific Name  | Common name                     | Federal listing status | Calif listing status | CNPS List | Other Status                  | General Habitat  | Micro-Habitat  |
|--|---------------------------------|------------------------|----------------------|-----------|-------------------------------|--|--|
| <i>Atriplex subtilis</i>                                 | subtle orache                   | None                   | None                 | 1B.2      | BLM-Sensitive                 | Valley and foothill grassland.   | Little info available. Madrono Vol. 44 No.2 only source currently. 40-100m.  |
| <i>Pholisma sonora</i>                                   | sand food                       | None                   | None                 | 1B.2      | BLM-Sensitive                 | Desert dunes.  | Loose, deep sand dunes, usu on the more stable, windward face. 0-200m.   |
| <i>Ivesia campestris</i>                                 | field ivesia                    | None                   | None                 | 1B.2      |                               | Subalpine coniferous forest, upper montane coniferous forest, meadows.   | Meadow edges. 2200-3100m.  |
| <i>Calochortus westonii</i>                              | Shirley Meadows star-tulip      | None                   | None                 | 1B.2      | BLM-Sensitive; USFS-Sensitive | Broadleaved upland forest, lower montane coniferous forest, meadows.   | Meadows, open woodlands; granite substrates. 1500-2060m  |
| <i>Astragalus cimae</i> var. <i>cimae</i>                | Cima milk-vetch                 | None                   | None                 | 1B.2      |                               | Great Basin scrub, Joshua tree woodland, pinyon-juniper woodland.  | Mesas and stony hillsides, in stiff, calcareous clay soils, commonly among or sheltering under sagebrush. 890-1850m.                 |
| <i>Sibaropsis hammittii</i>                              | Hammitt's clay-cress            | None                   | None                 | 1B.2      | USFS-Sensitive                | Valley and foothill grassland, chaparral.  | Mesic microsites in open areas on clay soils in stipa grassland. Often surrounded by <i>Adenostoma</i> chaparral. 730-1065m.         |
| <i>Lewisia cantelovii</i>                                | Cantelow's lewisia              | None                   | None                 | 1B.2      | BLM-Sensitive; USFS-Sensitive | Broadleaved upland forest, lower montane coniferous forest, cismontane woodland, chaparral.                    | Mesic rock outcrops and wet cliffs, usually in moss or clubmoss; on granitics or sometimes on serpentine. 330-1340m.                 |
| <i>Plagiobothrys chorisianus</i> var. <i>chorisianus</i> | Choris' popcorn-flower          | None                   | None                 | 1B.2      |                               | Chaparral, coastal scrub, coastal prairie.   | Mesic sites. 15-100m.  |
| <i>Lupinus latifolius</i> var. <i>barbatus</i>           | bearded lupine                  | None                   | None                 | 1B.2      | USFS-Sensitive                | Upper montane coniferous forest.   | Mesic sites. 1500-2500m.   |
| <i>Heuchera maxima</i>                                   | Island alumroot                 | None                   | None                 | 1B.2      |                               | Coastal bluff scrub, chaparral, coastal scrub.   | Moist north-facing canyon walls, rocky banks, and sea-cliffs. 5-500m.  |
| <i>Rorippa columbiae</i>                                 | Columbia yellow cress           | None                   | None                 | 1B.2      | BLM-Sensitive; USFS-Sensitive | Pinyon-juniper woodland, meadows and seeps, playas.  | Moist sandy soil, low gravelly river banks, basaltic lava slopes. 360-1800m.   |
| <i>Schizymerium shevockii</i>                            | Shevock's copper moss           | None                   | None                 | 1B.2      |                               | Cismontane woodland.   | Moss on metamorphic rocks, mesic sites. On rocks along roads, in same habitat as <i>Mielichhoferia elongata</i> . 750-1400m.         |
| <i>Tortula californica</i>                               | California screw moss           | None                   | None                 | 1B.2      | BLM-Sensitive                 | Chenopod scrub, valley and foothill grassland.   | Moss growing on sandy soil. 10-1460m.  |
| <i>Triquetrella californica</i>                          | coastal triquetrella            | None                   | None                 | 1B.2      |                               | Coastal bluff scrub, coastal scrub.  | Moss growing on soil. 10-100m.   |
| <i>Eriophyllum mohavense</i>                             | Barstow woolly sunflower        | None                   | None                 | 1B.2      | BLM-Sensitive                 | Desert chenopod scrub, Mojavean desert scrub, desert playas.   | Mostly in open, silty or sandy areas w/saltbush scrub, or creosote scrub. Barren ridges or margins of playas. 500-900m               |
| <i>Mimulus shevockii</i>                                 | Kelso Creek monkeyflower        | None                   | None                 | 1B.2      | BLM-Sensitive; USFS-Sensitive | Joshua tree woodland, pinyon-juniper woodland.   | Mostly known from Joshua tree-xeric conifer woodland in the high desert, in loose, granitic sandy soil. 825-1340m.                   |
| <i>Chlorogalum grandiflorum</i>                          | Red Hills soaproot              | None                   | None                 | 1B.2      | BLM-Sensitive                 | Cismontane woodland, chaparral, lower montane coniferous forest.   | Occurs frequently on serpentine or gabbro, but also on non-ultramafic substrates; often on "historically disturbed" sites. 240-760m. |
| <i>Monardella hypoleuca</i> ssp. <i>lanata</i>           | felt-leaved monardella          | None                   | None                 | 1B.2      | USFS-Sensitive                | Chaparral, cismontane woodland.  | Occurs in understory in mixed chaparral, chamise chaparral, and southern oak woodland; sandy soil. 300-1575m.                        |
| <i>Calochortus plummerae</i>                             | Plummer's mariposa-lily         | None                   | None                 | 1B.2      | USFS-Sensitive                | Coastal scrub, chaparral, valley and foothill grassland, cismontane woodland, lower montane coniferous forest. | Occurs on rocky and sandy sites, usually of granitic or alluvial material. Can be very common after fire. 90-1610m.                  |
| <i>Calochortus clavatus</i> var. <i>recurvifolius</i>    | Arroyo de la Cruz mariposa-lily | None                   | None                 | 1B.2      |                               | Coastal bluff scrub, maritime chaparral, coastal prairie, lower montane coniferous forest.                     | Ocean bluffs, grassy slopes, above riparian zones and in grassland bordering chaparral. 10-125m.                                     |
| <i>Atriplex coulteri</i>                                 | Coulter's saltbush              | None                   | None                 | 1B.2      |                               | Coastal bluff scrub, coastal dunes, coastal scrub, valley and foothill grassland.                              | Ocean bluffs, ridgetops, as well as alkaline low places. 10-440m.  |
| <i>Deinandra floribunda</i>                              | Tecate tarplant                 | None                   | None                 | 1B.2      | BLM-Sensitive; USFS-Sensitive | Chaparral, coastal scrub.  | Often in little drainages or disturbed areas. 70-1220m.  |
| <i>Trichostema ruygii</i>                                | Napa bluecurls                  | None                   | None                 | 1B.2      |                               | Cismontane woodland, chaparral, valley and foothill grassland, vernal pools, lower montane coniferous forest.  | Often in open, sunny areas. Also has been found in vernal pools. 30-590m.  |
| <i>Clarkia biloba</i> ssp. <i>brandegeae</i>             | Brandegee's clarkia             | None                   | None                 | 1B.2      | BLM-Sensitive; USFS-Sensitive | Chaparral, cismontane woodland.  | Often in roadcuts. 295-885m.   |
| <i>Hesperolinon breweri</i>                              | Brewer's western flax           | None                   | None                 | 1B.2      | BLM-Sensitive                 | Chaparral, cismontane woodland, valley and foothill grassland.   | Often in rocky serpentine soil in serpentine chaparral and serpentine grassland. 30-885m.  |
| <i>Calochortus obispoensis</i>                           | La Panza mariposa-lily          | None                   | None                 | 1B.2      | BLM-Sensitive; USFS-Sensitive | Chaparral, coastal scrub, valley and foothill grassland.   | Often in serpentine grassland. 75-665m.  |

Table J-2b. Plant Species Considered in this EIR (Upland species)

| Scientific Name                                   | Common name                | Federal listing status | Calif listing status | CNPS List | Other Status                  | General Habitat  | Micro-Habitat  |
|---|----------------------------|------------------------|----------------------|-----------|-------------------------------|--|--|
| <i>Erythronium tuolumnense</i>                    | Tuolumne fawn lily         | None                   | None                 | 1B.2      | BLM-Sensitive; USFS-Sensitive | Broadleaved upland forest, chaparral, lower montane coniferous forest.                             | Often on clay soils; on cliffs and near drainages. 510-1460m.  |
| <i>Silene verecunda</i> ssp. <i>verecunda</i>     | San Francisco campion      | None                   | None                 | 1B.2      |                               | Coastal scrub, valley and foothill grassland, coastal bluff scrub, chaparral, coastal prairie.     | Often on mudstone or shale; one site on serpentine. 30-645m.   |
| <i>Castilleja mendocinensis</i>                   | Mendocino Coast paintbrush | None                   | None                 | 1B.2      | BLM-Sensitive                 | Coastal bluff scrub, coastal scrub, coastal prairie, closed-cone coniferous forest, coastal dunes. | Often on sea bluffs or cliffs in coastal bluff scrub or prairie. 0-160m.   |
| <i>Fritillaria liliacea</i>                       | fragrant fritillary        | None                   | None                 | 1B.2      | USFS-Sensitive                | Coastal scrub, valley and foothill grassland, coastal prairie.                                     | Often on serpentine; various soils reported though usually clay, in grassland. 3-410m.                                   |
| <i>Monardella crisper</i>                         | crisp monardella           | None                   | None                 | 1B.2      | BLM-Sensitive                 | Coastal dunes, coastal scrub.  | Often on the borders of open, sand areas, usually adjacent to typical backdune scrub vegetation. 5-120m.                 |
| <i>Delphinium recurvatum</i>                      | recurved larkspur          | None                   | None                 | 1B.2      | BLM-Sensitive                 | Chenopod scrub, valley and foothill grassland, cismontane woodland.                                | On alkaline soils; often in valley saltbush or valley chenopod scrub. 3-685m.  |
| <i>Eriastrum luteum</i>                           | yellow-flowered eriastrum  | None                   | None                 | 1B.2      | BLM-Sensitive; USFS-Sensitive | Broadleaved upland forest, cismontane woodland, chaparral.   | On bare sandy decomposed granite slopes. 360-1000m.  |
| <i>Eriastrum brandegeae</i>                       | Brandegee's eriastrum      | None                   | None                 | 1B.2      | BLM-Sensitive                 | Chaparral, cismontane woodland.  | On barren volcanic soils; often in open areas. 345-1000m.  |
| <i>Aphanisma blitoides</i>                        | aphanisma                  | None                   | None                 | 1B.2      |                               | Coastal bluff scrub, coastal dunes, coastal scrub.   | On bluffs and slopes near the ocean in sandy or clay soils. In steep decline on the islands and the mainland. 1-305m.    |
| <i>Arabis breweri</i> var. <i>pecuniaria</i>      | San Bernardino rock-cress  | None                   | None                 | 1B.2      | USFS-Sensitive                | Subalpine coniferous forest.   | On cliffs and talus slopes. 2700-3200m.  |
| <i>Collinsia multicolor</i>                       | San Francisco collinsia    | None                   | None                 | 1B.2      |                               | Closed-cone coniferous forest, coastal scrub.  | On decomposed shale (mudstone) mixed with humus. 30-250m.  |
| <i>Rupertia hallii</i>                            | Hall's rupertia            | None                   | None                 | 1B.2      | BLM-Sensitive; USFS-Sensitive | Cismontane woodland, lower montane coniferous forest.  | On disturbed soils of roadsides and logged forests. 1000-1400m.  |
| <i>Cirsium occidentale</i> var. <i>compactum</i>  | compact cobwebby thistle   | None                   | None                 | 1B.2      |                               | Chaparral, coastal dunes, coastal prairie, coastal scrub.  | On dunes and on clay in chaparral; also in grassland. 5-155m.  |
| <i>Cymopterus deserticola</i>                     | desert cymopterus          | None                   | None                 | 1B.2      | BLM-Sensitive                 | Joshua tree woodland, Mojavean desert scrub. Most occurrences located near or in Edwards AFB.      | On fine to coarse, loose, sandy soil of flats in old dune areas with well-drained sand. 625-910m.                        |
| <i>Dudleya cymosa</i> ssp. <i>costifolia</i>      | Pierpoint Springs dudleya  | None                   | None                 | 1B.2      | USFS-Sensitive                | Chaparral, cismontane woodland.  | On limestone on S-facing slope w/ <i>Arabis</i> , <i>Cercocarpus</i> , <i>Fremontodendron</i> , etc. 1030-1455m.         |
| <i>Dudleya viscida</i>                            | sticky dudleya             | None                   | None                 | 1B.2      | USFS-Sensitive                | Coastal scrub, coastal bluff scrub, chaparral.   | On north and south-facing cliffs and banks. 10-550m.   |
| <i>Draba asterophora</i> var. <i>asterophora</i>  | Tahoe draba                | None                   | None                 | 1B.2      | USFS-Sensitive                | Alpine boulder and rock field, subalpine coniferous forest.  | On open talus slopes, rock outcrops and crevices. On decomposed granite. 2500-3505m.                                     |
| <i>Delphinium parryi</i> ssp. <i>blochmaniae</i>  | dune larkspur              | None                   | None                 | 1B.2      | BLM-Sensitive                 | Chaparral, coastal dunes (maritime).   | On rocky areas and dunes. 30-375m.   |
| <i>Crossosoma californicum</i>                    | Catalina crossosoma        | None                   | None                 | 1B.2      |                               | Chaparral, coastal scrub.  | On rocky sea bluffs, wooded canyons, and dry, open sunny spots on rocky clay. 0-500m.                                    |
| <i>Dudleya abramsii</i> ssp. <i>bettinae</i>      | Betty's dudleya            | None                   | None                 | 1B.2      |                               | Coastal scrub, valley and foothill grassland, chaparral.   | On rocky, barren exposures of serpentine within scrub vegetation. 20-180m.   |
| <i>Delphinium hutchinsoniae</i>                   | Hutchinson's larkspur      | None                   | None                 | 1B.2      | USFS-Sensitive                | Broadleaved upland forest, chaparral, coastal prairie, coastal scrub.                              | On semi-shaded, slightly moist slopes, usually west-facing. 0-365m.  |
| <i>Triphysaria floribunda</i>                     | San Francisco owl's-clover | None                   | None                 | 1B.2      |                               | Coastal prairie, valley and foothill grassland.  | On serpentine and nonserpentine substrate (such as at Pt. Reyes). 10-160m.   |
| <i>Allium jepsonii</i>                            | Jepson's onion             | None                   | None                 | 1B.2      | BLM-Sensitive; USFS-Sensitive | Cismontane woodland, lower montane coniferous forest.  | On serpentine soils in Sierra foothills, volcanic soil on Table Mtn. on slopes and flats; usu in an open area. 450-1130m |
| <i>Monardella palmeri</i>                         | Palmer's monardella        | None                   | None                 | 1B.2      | USFS-Sensitive                | Cismontane woodland, chaparral.  | On serpentine, often found associated with Sargent cypress forests. 200-800m.  |
| <i>Calochortus raichei</i>                        | The Cedars fairy-lantern   | None                   | None                 | 1B.2      |                               | Closed-cone coniferous forest, chaparral.  | On serpentine. Usually on shaded slopes, but also on barrens and talus. 200-395m.  |
| <i>Frangula purshiana</i> ssp. <i>ultramafica</i> | Caribou coffeeberry        | None                   | None                 | 1B.2      |                               | Lower montane coniferous forest, upper montane coniferous forest, chaparral.                       | On serpentine. 825-1930m.  |
| <i>Fritillaria falcata</i>                        | talus fritillary           | None                   | None                 | 1B.2      | BLM-Sensitive; USFS-Sensitive | Chaparral, cismontane woodland, lower montane coniferous forest.                                   | On shale, granite, or serpentine talus. 300-1525m.   |
| <i>Coreopsis hamiltonii</i>                       | Mt. Hamilton coreopsis     | None                   | None                 | 1B.2      | BLM-Sensitive                 | Cismontane woodland.   | On steep shale talus with open southwestern exposure. 530-1300m.   |
| <i>Monardella stebbinsii</i>                      | Stebbins' monardella       | None                   | None                 | 1B.2      | USFS-Sensitive                | Broadleaved upland forest, chaparral, lower montane coniferous forest.                             | On steep, loose slopes of generally reddish serpentine talus and boulders. 750-1100m.                                    |

Table J-2b. Plant Species Considered in this EIR (Upland species)

| Scientific Name                                | Common name                      | Federal listing status | Calif listing status | CNPS List | Other Status                  | General Habitat  | Micro-Habitat   |
|--|----------------------------------|------------------------|----------------------|-----------|-------------------------------|--|---|
| <i>Calochortus greenei</i>                     | Greene's mariposa-lily           | None                   | None                 | 1B.2      | BLM-Sensitive; USFS-Sensitive | Meadows, pinyon and juniper woodland, upper montane coniferous forest.                               | On volcanic outcrops and open, dry, gravelly soils. 1035-1890m.   |
| <i>Calochortus pulchellus</i>                  | Mt. Diablo fairy-lantern         | None                   | None                 | 1B.2      |                               | Chaparral, cismontane woodland, riparian woodland, valley and foothill grassland.                    | On wooded and brushy slopes. 200-800m.  |
| <i>Stebbinsoseris decipiens</i>                | Santa Cruz microseris            | None                   | None                 | 1B.2      |                               | Broadleaved upland forest, closed-cone coniferous forest, chaparral, coastal prairie, coastal scrub. | Open areas in loose or disturbed soil, usu. derived from sandstone, shale or serp., on seaward slopes. 10-500m.         |
| <i>Lupinus ludovicianus</i>                    | San Luis Obispo County lupine    | None                   | None                 | 1B.2      | BLM-Sensitive; USFS-Sensitive | Chaparral, cismontane woodland.  | Open areas in sandy soil, Santa Margarita formation. 50-525m.   |
| <i>Astragalus webberi</i>                      | Webber's milk-vetch              | None                   | None                 | 1B.2      | BLM-Sensitive; USFS-Sensitive | Lower montane coniferous forest.   | Open brushy slopes and flats in xeric pine forest or mixed pine-oak forest. 800-1220m.                                  |
| <i>Galium grande</i>                           | San Gabriel bedstraw             | None                   | None                 | 1B.2      | BLM-Sensitive; USFS-Sensitive | Cismontane woodland, chaparral, broadleaved upland forest, lower montane coniferous forest.          | Open chaparral and low, open oak forest; on rocky slopes; probably undercollected due to inaccessible hab. 425-1200m.   |
| <i>Sidalcea malviflora ssp. patula</i>         | Siskiyou checkerbloom            | None                   | None                 | 1B.2      | BLM-Sensitive                 | Coastal prairie, broadleaved upland forest.  | Open coastal forest. 15-65m.  |
| <i>Tracyina rostrata</i>                       | beaked tracyina                  | None                   | None                 | 1B.2      | USFS-Sensitive                | Cismontane woodland, valley and foothill grassland.  | Open grassy meadows within oak woodland and grassland habitats. 150-500m.   |
| <i>Phacelia insularis var. continentis</i>     | North Coast phacelia             | None                   | None                 | 1B.2      |                               | Coastal bluff scrub, coastal dunes.  | Open maritime bluffs, sandy soil. 10-160m.  |
| <i>Monardella follettii</i>                    | Follett's monardella             | None                   | None                 | 1B.2      | USFS-Sensitive                | Lower montane coniferous forest.   | Open rocky serpentine slopes. 600-2000m.  |
| <i>Lupinus spectabilis</i>                     | shaggyhair lupine                | None                   | None                 | 1B.2      | BLM-Sensitive                 | Chaparral, cismontane woodland.  | Open rocky slopes of serpentine. Mostly in serpentine chaparral surr. by grey pine woodland. 260-800m.                  |
| <i>Leptosiphon jepsonii</i>                    | Jepson's leptosiphon             | None                   | None                 | 1B.2      |                               | Chaparral, cismontane woodland.  | Open to partially shaded grassy slopes. on volcanics or the periphery of serpentine substrates. 100-500m.               |
| <i>Lomatium observatorium</i>                  | Mt. Hamilton lomatium            | None                   | None                 | 1B.2      |                               | Cismontane woodland.   | Open to partially shaded openings in Pinus coulteri-oak woodland. Sedimentary franciscan rocks & volcanics. 1219-1330m. |
| <i>Balsamorhiza lanata</i>                     | woolly balsamroot                | None                   | None                 | 1B.2      | BLM-Sensitive                 | Cismontane woodland.   | Open woods, grassy slopes. (575)800-1050m.  |
| <i>Oreonana purpurascens</i>                   | purple mountain-parsley          | None                   | None                 | 1B.2      | USFS-Sensitive                | Subalpine coniferous forest, upper montane coniferous forest, broadleaved upland forest.             | Open, metamorphic ridgetops in red fir forest. 2360-2900m.  |
| <i>Clarkia australis</i>                       | Small's southern clarkia         | None                   | None                 | 1B.2      | BLM-Sensitive; USFS-Sensitive | Cismontane woodland, lower montane coniferous forest.  | Open, rocky sites in conifer forest or oak woodland. 900-2060m.   |
| <i>Castilleja rubicundula ssp. rubicundula</i> | pink creamsacs                   | None                   | None                 | 1B.2      | BLM-Sensitive                 | Chaparral, meadows and seeps, valley and foothill grassland.   | Openings in chaparral or grasslands. On serpentine. 20-900m.  |
| <i>Astragalus oocarpus</i>                     | San Diego milk-vetch             | None                   | None                 | 1B.2      | BLM-Sensitive; USFS-Sensitive | Chaparral, cismontane woodland, meadows.   | Openings in chaparral or on gravelly flats and slopes in thin oak woodland. 305-1500m.                                  |
| <i>Horkelia parryi</i>                         | Parry's horkelia                 | None                   | None                 | 1B.2      | BLM-Sensitive; USFS-Sensitive | Chaparral, cismontane woodland.  | Openings in chaparral or woodland; especially known from the lone formation in Amador County. 80-1035m.                 |
| <i>Streptanthus breweri var. hesperidis</i>    | green jewel-flower               | None                   | None                 | 1B.2      |                               | Chaparral, cismontane woodland.  | Openings in chaparral or woodland; serpentine, rocky sites. 130-760m.   |
| <i>Amorpha californica var. napensis</i>       | Napa false indigo                | None                   | None                 | 1B.2      |                               | Broadleaved upland forest, chaparral, cismontane woodland.   | Openings in forest or woodland or in chaparral. 150-2000m   |
| <i>Silene salmonacea</i>                       | Klamath Mountain catchfly        | None                   | None                 | 1B.2      |                               | Lower montane coniferous forest.   | Openings in serpentine. 775-1045m.  |
| <i>Silene marmorensis</i>                      | Marble Mountain campion          | None                   | None                 | 1B.2      |                               | Broadleaved upland forest, lower montane coniferous forest, cismontane woodland.                     | Openings with little vegetation, shady areas, often along trails; can be on serpentine. 165-1250m.                      |
| <i>Monardella villosa ssp. globosa</i>         | robust monardella                | None                   | None                 | 1B.2      | BLM-Sensitive                 | Broadleaved upland forest, chaparral, cismontane woodland, valley and foothill grassland.            | Openings. 30-300m.  |
| <i>Lasthenia californica ssp. bakeri</i>       | Baker's goldfields               | None                   | None                 | 1B.2      |                               | Closed-cone coniferous forest, coastal scrub.  | Openings. 60-520m.  |
| <i>Dudleya abramsii ssp. affinis</i>           | San Bernardino Mountains dudleya | None                   | None                 | 1B.2      | USFS-Sensitive                | Pebble (pavement) plain, upper montane coniferous forest, pinyon and juniper woodland.               | Outcrops, granite or quartzite, rarely limestone. 1270-2600m.   |
| <i>Nolina cismontana</i>                       | Peninsular nolina                | None                   | None                 | 1B.2      | USFS-Sensitive                | Chaparral, coastal scrub.  | Primarily on sandstone and shale substrates; also known from gabbro. 140-1275m.   |
| <i>Lupinus duranii</i>                         | Mono Lake lupine                 | None                   | None                 | 1B.2      | BLM-Sensitive; USFS-Sensitive | Great Basin scrub, subalpine coniferous forest, upper montane coniferous forest.                     | Pumice sand flats, coarse barren soils of volcanic origin. 2000-3000m.  |

Table J-2b. Plant Species Considered in this EIR (Upland species)

| Scientific Name                                      | Common name                    | Federal listing status | Calif listing status | CNPS List | Other Status                  | General Habitat  | Micro-Habitat   |
|--|--------------------------------|------------------------|----------------------|-----------|-------------------------------|--|---|
| <i>Lewisia stebbinsii</i>                            | Stebbins' lewisia              | None                   | None                 | 1B.2      | USFS-Sensitive                | Upper montane coniferous forest, lower montane coniferous forest.  | Relatively barren exposed ridges and slopes in nutrient poor soils (mostly serpentine). 1680-2050m.   |
| <i>Allium tuolumnense</i>                            | Rawhide Hill onion             | None                   | None                 | 1B.2      | BLM-Sensitive                 | Cismontane woodland.   | Restricted to serpentine soil, usu in grey pine chaparral. steep, rocky, S-facing slopes or small drainages. 300-600m.  |
| <i>Thermopsis robusta</i>                            | robust false lupine            | None                   | None                 | 1B.2      | USFS-Sensitive                | North Coast coniferous forest, broadleaved upland forest.  | Ridgetops; sometimes on serpentine. 360-1290m.  |
| <i>Erigeron multiceps</i>                            | Kern River daisy               | None                   | None                 | 1B.2      | BLM-Sensitive; USFS-Sensitive | Joshua tree woodland, meadows, upper montane coniferous forest.  | River banks and dry meadow borders; usually in open, grassy areas. 1780-2500m.  |
| <i>Malacothrix saxatilis</i> var. <i>arachnoidea</i> | Carmel Valley malacothrix      | None                   | None                 | 1B.2      | BLM-Sensitive; USFS-Sensitive | Chaparral.   | Rock outcrops or steep rocky roadcuts. 25-1215m.  |
| <i>Munzothamnus blairii</i>                          | Blair's munzothamnus           | None                   | None                 | 1B.2      |                               | Coastal scrub, coastal bluff scrub.  | Rocky canyon walls. 20-455m.  |
| <i>Scrophularia villosa</i>                          | Santa Catalina figwort         | None                   | None                 | 1B.2      |                               | Chaparral, coastal scrub.  | Rocky canyons; "canyon floor." 45-510m.   |
| <i>Galvezia speciosa</i>                             | showy island snapdragon        | None                   | None                 | 1B.2      |                               | Coastal scrub.   | Rocky cliffs and canyons. 0-365m.   |
| <i>Eriogonum nudum</i> var. <i>regirivum</i>         | Kings River buckwheat          | None                   | None                 | 1B.2      | USFS-Sensitive                | Cismontane woodland.   | Rocky limestone slopes along the Kings River. 210-610m.   |
| <i>Lewisia cotyledon</i> var. <i>heckneri</i>        | Heckner's lewisia              | None                   | None                 | 1B.2      | BLM-Sensitive                 | Lower montane coniferous forest.   | Rocky places. 225-1970m.  |
| <i>Campanula exigua</i>                              | chaparral harebell             | None                   | None                 | 1B.2      | BLM-Sensitive                 | Chaparral.   | Rocky sites, usually on serpentine in chaparral. 300-1250m.   |
| <i>Fritillaria ojaiensis</i>                         | Ojai fritillary                | None                   | None                 | 1B.2      | BLM-Sensitive; USFS-Sensitive | Broadleaved upland forest (mesic), chaparral, lower montane coniferous forest.                           | Rocky sites; one reported as "moist shale talus." 300-670m.   |
| <i>Castilleja lanata</i> ssp. <i>hololeuca</i>       | island white-felted paintbrush | None                   | None                 | 1B.2      |                               | Chaparral, coastal scrub.  | Rocky slopes. 5-400m.   |
| <i>Calycaenia micrantha</i>                          | small-flowered calycadenia     | None                   | None                 | 1B.2      | BLM-Sensitive; USFS-Sensitive | Chaparral, valley and foothill grassland, meadows and seeps, lower montane coniferous forest.            | Rocky talus or scree; sparsely vegetated areas. occasionally on roadsides; sometimes on serpentine. 5-1500m.  |
| <i>Lupinus citrinus</i> var. <i>citrinus</i>         | orange lupine                  | None                   | None                 | 1B.2      | BLM-Sensitive; USFS-Sensitive | Chaparral, cismontane woodland, lower montane coniferous forest.   | Rocky, decomposed granitic outcrops, usually open areas, on flat to rolling terrain. 600-1350m.   |
| <i>Satureja chandleri</i>                            | San Miguel savory              | None                   | None                 | 1B.2      | USFS-Sensitive                | Chaparral, cismontane woodland, coastal scrub, rip woodland, valley and foothill grassland.              | Rocky, gabbroic or metavolcanic substrate. 120-1005m.   |
| <i>Calystegia collina</i> ssp. <i>tridactylosa</i>   | coast range bindweed           | None                   | None                 | 1B.2      | BLM-Sensitive                 | Chaparral, cismontane woodland.  | Rocky, gravelly openings in serpentine. 0-600m.   |
| <i>Lomatium roseanum</i>                             | adobe lomatium                 | None                   | None                 | 1B.2      | BLM-Sensitive; USFS-Sensitive | Lower montane coniferous forest, Great Basin scrub.  | Rocky, gravelly openings. 1460-2145m.   |
| <i>Ageratina shastensis</i>                          | Shasta ageratina               | None                   | None                 | 1B.2      |                               | Chaparral, lower montane coniferous forest.  | Rocky, sometimes limestone. 400-1800m.  |
| <i>Erigeron blochmaniae</i>                          | Blochman's leafy daisy         | None                   | None                 | 1B.2      | BLM-Sensitive                 | Coastal dunes.   | Sand dunes and hills. 3-185m.   |
| <i>Scrophularia atrata</i>                           | black-flowered figwort         | None                   | None                 | 1B.2      |                               | Closed-cone coniferous forest, chaparral, coastal dunes, coastal scrub, riparian scrub.                  | Sand, diatomaceous shales, and soils derived from other parent material; around swales and in sand dunes. 10-250m.  |
| <i>Plagiobothrys uncinatus</i>                       | hooked popcorn-flower          | None                   | None                 | 1B.2      | BLM-Sensitive; USFS-Sensitive | Chaparral, cismontane woodland, valley and foothill grassland, coastal bluff scrub.                      | Sandstone outcrops and canyon sides; often in burned or disturbed areas. 300-820m.  |
| <i>Orthotrichum kellmanii</i>                        | Kellman's bristle moss         | None                   | None                 | 1B.2      |                               | Chaparral, cismontane oak woodland.  | Sandstone outcrops with high calcium concentrations from eroded boulders out of non-calcareous sandstone bedrock. Rock outcrops in small openings within dense chaparral with overstory of scattered <i>Pinus attenuata</i> . 343-685m. |
| <i>Chorizanthe biloba</i> var. <i>immemora</i>       | Hernandez spineflower          | None                   | None                 | 1B.2      | BLM-Sensitive                 | Chaparral, cismontane woodland.  | Sandy and gravelly soils on the east slope of the Diablo Range. 695-750m.   |
| <i>Hesperexav sparsiflora</i> var. <i>brevifolia</i> | short-leaved evax              | None                   | None                 | 1B.2      | BLM-Sensitive                 | Coastal bluff scrub, coastal dunes.  | Sandy bluffs and flats. 0-200m.   |
| <i>Horkelia marinensis</i>                           | Point Reyes horkelia           | None                   | None                 | 1B.2      |                               | Coastal dunes, coastal prairie, coastal scrub.   | Sandy flats and dunes near coast; in grassland or scrub plant communities. 5-30m.   |
| <i>Allium hickmanii</i>                              | Hickman's onion                | None                   | None                 | 1B.2      | BLM-Sensitive; USFS-Sensitive | Closed-cone coniferous forest, chaparral, coastal scrub, valley and foothill grassland, coastal prairie. | Sandy loam, damp ground and vernal swales; mostly in grassland though can be assoc. with chaparral or woodland. 20-200m   |
| <i>Erysimum ammophilum</i>                           | sand-loving wallflower         | None                   | None                 | 1B.2      | BLM-Sensitive                 | Chaparral (maritime), coastal dunes, coastal scrub.  | Sandy openings. 0-130m.   |

Table J-2b. Plant Species Considered in this EIR (Upland species)

| Scientific Name  | Common name                           | Federal listing status | Calif listing status | CNPS List | Other Status                  | General Habitat   | Micro-Habitat  |
|--|---------------------------------------|------------------------|----------------------|-----------|-------------------------------|---|--|
| <i>Calyptidium pygmaeum</i>                            | pygmy pussypaws                       | None                   | None                 | 1B.2      |                               | Upper montane coniferous forest, subalpine coniferous forest.   | Sandy or gravelly sites. 1980-3110m.   |
| <i>Agrostis blasdalei</i>                              | Blasdale's bent grass                 | None                   | None                 | 1B.2      | BLM-Sensitive                 | Coastal dunes, coastal bluff scrub, coastal prairie. Includes <i>Agrostis blasdalei</i> var. <i>marinensis</i> , State-listed Rare. | Sandy or gravelly soil close to rocks; often in nutrient-poor soil with sparse vegetation. 5-150m.                   |
| <i>Chamaesyce ocellata</i> ssp. <i>rattanii</i>        | Stony Creek spurge                    | None                   | None                 | 1B.2      | BLM-Sensitive                 | Valley and foothill grassland.  | Sandy or rocky soils. 85-800m.   |
| <i>Grindelia hirsutula</i> var. <i>maritima</i>        | San Francisco gumplant                | None                   | None                 | 1B.2      |                               | Coastal scrub, coastal bluff scrub, valley and foothill grassland.  | Sandy or serpentine slopes, sea bluffs. 15-400m.   |
| <i>Chorizanthe cuspidata</i> var. <i>villosa</i>       | woolly-headed spineflower             | None                   | None                 | 1B.2      |                               | Coastal scrub, coastal dunes, coastal prairie.  | Sandy places near the beach. 3-60m.  |
| <i>Chamaesyce platysperma</i>                          | flat-seeded spurge                    | None                   | None                 | 1B.2      | BLM-Sensitive                 | Sonoran desert scrub, desert dunes.   | Sandy places or shifting dunes. Possibly a waif in California; more common in Arizona and Mexico. 60-950m.           |
| <i>Linanthus maculatus</i>                             | Little San Bernardino Mtns. linanthus | None                   | None                 | 1B.2      | BLM-Sensitive                 | Desert dunes, Sonoran desert scrub, Mojavean desert scrub, Joshua tree woodland.  | Sandy places; microhab difficult to pin down. Usu. in light-colored quartz sand; often in wash or bajada. 195-2075m. |
| <i>Penstemon rattanii</i> var. <i>kleei</i>            | Santa Cruz Mountains beardtongue      | None                   | None                 | 1B.2      |                               | Chaparral, lower montane coniferous forest.   | Sandy shale slopes; sometimes in the transition between forest and chaparral. 400-1100m.                             |
| <i>Agrostis hooveri</i>                                | Hoover's bent grass                   | None                   | None                 | 1B.2      | BLM-Sensitive; USFS-Sensitive | Chaparral, cismontane woodland, valley and foothill grassland.  | Sandy sites. 60-600m.  |
| <i>Lomatium insulare</i>                               | San Nicolas Island lomatium           | None                   | None                 | 1B.2      |                               | Coastal bluff scrub.  | Sandy slopes, "lower sea terraces." 15-800m.   |
| <i>Opuntia basilaris</i> var. <i>brachyclada</i>       | short-joint beavertail                | None                   | None                 | 1B.2      | BLM-Sensitive; USFS-Sensitive | Chaparral, Joshua tree woodland, Mojavean desert scrub, pinyon-juniper woodland, riparian woodland.                                 | Sandy soil or coarse, granitic loam. 425-1800m.  |
| <i>Horkelia tenuiloba</i>                              | thin-lobed horkelia                   | None                   | None                 | 1B.2      | BLM-Sensitive                 | Coastal scrub, chaparral.   | Sandy soils; mesic openings. 45-500m.  |
| <i>Isocoma menziesii</i> var. <i>decumbens</i>         | decumbent goldenbush                  | None                   | None                 | 1B.2      |                               | Coastal scrub.  | Sandy soils; often in disturbed sites. 10-910m.  |
| <i>Eriogonum microthecum</i> var. <i>schoolcraftii</i> | Schoolcraft's wild buckwheat          | None                   | None                 | 1B.2      | BLM-Sensitive                 | Pinyon and juniper woodland, Great Basin scrub.   | Sandy to rocky substrates. 1300-1750m.   |
| <i>Lepidium flavum</i> var. <i>felipense</i>           | Borrego Valley pepper-grass           | None                   | None                 | 1B.2      | BLM-Sensitive                 | Sonoran desert scrub, pinyon-juniper woodland.  | Sandy, clay, or silty soils. 450-840m.   |
| <i>Eriogonum luteolum</i> var. <i>saltuarium</i>       | Jack's wild buckwheat                 | None                   | None                 | 1B.2      |                               | Upper montane coniferous forest, Great Basin scrub.   | Sandy, granitic substrates. 1700-2400m.  |
| <i>Layia septentrionalis</i>                           | Colusa layia                          | None                   | None                 | 1B.2      | BLM-Sensitive                 | Chaparral, cismontane woodland, valley and foothill grassland.  | Scattered colonies in fields and grassy slopes in sandy or serpentine soil. 145-1095m.                               |
| <i>Calochortus palmeri</i> var. <i>munzii</i>          | San Jacinto mariposa-lily             | None                   | None                 | 1B.2      | USFS-Sensitive                | Lower montane coniferous forest, chaparral, meadows.  | Seen in open Jeffrey pine forest as well as in chaparral. 900-1640m.   |
| <i>Iliamna latibracteata</i>                           | California globe mallow               | None                   | None                 | 1B.2      | USFS-Sensitive                | North Coast coniferous forest.  | Seepage areas in silty clay loam. 500-2000m.   |
| <i>Erigeron greenei</i>                                | Greene's narrow-leaved daisy          | None                   | None                 | 1B.2      |                               | Chaparral.  | Serpentine and volcanic substrates, generally in shrubby vegetation. 75-1060m.                                       |
| <i>Hesperolinon bicarpellatum</i>                      | two-carpellate western flax           | None                   | None                 | 1B.2      |                               | Serpentine chaparral.   | Serpentine barrens at edge of chaparral. 150-820m.   |
| <i>Lupinus constancei</i>                              | The Lassics lupine                    | None                   | None                 | 1B.2      | USFS-Sensitive                | Lower montane coniferous forest.  | Serpentine barrens. 1500-2000m.  |
| <i>Harmonia hallii</i>                                 | Hall's harmonia                       | None                   | None                 | 1B.2      | BLM-Sensitive                 | Chaparral.  | Serpentine hills and ridges. Open, rocky areas within chaparral. 500-900m.   |
| <i>Silene serpentinicola</i>                           | serpentine catchfly                   | None                   | None                 | 1B.2      | USFS-Sensitive                | Chaparral, lower montane coniferous forest.   | Serpentine openings, gravelly or rocky soils. 145-1650m.   |
| <i>Streptanthus albidus</i> ssp. <i>peramoenus</i>     | most beautiful jewel-flower           | None                   | None                 | 1B.2      | USFS-Sensitive                | Chaparral, valley and foothill grassland, cismontane woodland.  | Serpentine outcrops, on ridges and slopes. 120-730m.   |
| <i>Streptanthus brachiatus</i> ssp. <i>hoffmanii</i>   | Freed's jewel-flower                  | None                   | None                 | 1B.2      | BLM-Sensitive                 | Chaparral, cismontane woodland.   | Serpentine rock outcrops, primarily in geothermal development areas. 480-1030m.                                      |
| <i>Cirsium hydrophilum</i> var. <i>vaseyi</i>          | Mt. Tamalpais thistle                 | None                   | None                 | 1B.2      |                               | Broadleaved upland forest, chaparral.   | Serpentine seeps and streams in chaparral and woodland. 265-620m.  |
| <i>Streptanthus insignis</i> ssp. <i>lyonii</i>        | Arburua Ranch jewel-flower            | None                   | None                 | 1B.2      |                               | Coastal scrub.  | Serpentine slopes, also on non-serpentine. 230-850m.   |
| <i>Streptanthus glandulosus</i> ssp. <i>pulchellus</i> | Mount Tamalpais bristly jewel-flower  | None                   | None                 | 1B.2      |                               | Chaparral, valley and foothill grassland.   | Serpentine slopes. 150-800m.   |
| <i>Fritillaria viridea</i>                             | San Benito fritillary                 | None                   | None                 | 1B.2      | BLM-Sensitive; USFS-Sensitive | Chaparral.  | Serpentine slopes. 200-1525m.  |
| <i>Lomatium congdonii</i>                              | Congdon's lomatium                    | None                   | None                 | 1B.2      | BLM-Sensitive                 | Cismontane woodland, chaparral.   | Serpentine soils with serpentine chaparral plants and grey pines. 300-610m.  |
| <i>Hesperolinon drymarioides</i>                       | drymaria-like western flax            | None                   | None                 | 1B.2      | BLM-Sensitive; USFS-Sensitive | Closed-cone coniferous forest, chaparral, cismontane woodland, valley and foothill grassland.                                       | Serpentine soils, mostly within chaparral. 390-1000m.  |

Table J-2b. Plant Species Considered in this EIR (Upland species)

| Scientific Name                                       | Common name                | Federal listing status | Calif listing status | CNPS List | Other Status                  | General Habitat   | Micro-Habitat  |
|---|----------------------------|------------------------|----------------------|-----------|-------------------------------|---|--|
| <i>Hesperolinon adenophyllum</i>                      | glandular western flax     | None                   | None                 | 1B.2      | BLM-Sensitive                 | Chaparral, cismontane woodland, valley and foothill grassland.                              | Serpentine soils; generally found in serpentine chaparral. 425-1315m.  |
| <i>Eriogonum luteolum</i> var. <i>caninum</i>         | Tiburon buckwheat          | None                   | None                 | 1B.2      |                               | Chaparral, valley and foothill grassland, cismontane woodland, coastal prairie.             | Serpentine soils; sandy to gravelly sites. 0-700m.   |
| <i>Chlorogalum pomeridianum</i> var. <i>minus</i>     | dwarf soaproot             | None                   | None                 | 1B.2      | BLM-Sensitive; USFS-Sensitive | Chaparral, valley and foothill grassland.   | Serpentine. 240-970m.  |
| <i>Lessingia micradenia</i> var. <i>glabrata</i>      | smooth lessingia           | None                   | None                 | 1B.2      |                               | Chaparral.  | Serpentine; often on roadsides. 120-485m.  |
| <i>Clarkia biloba</i> ssp. <i>australis</i>           | Mariposa clarkia           | None                   | None                 | 1B.2      | BLM-Sensitive; USFS-Sensitive | Chaparral, cismontane woodland.   | Several EO's occur in the foothill woodland/riparian ecotone. 300-945m.  |
| <i>Calochortus clavatus</i> var. <i>gracilis</i>      | slender mariposa-lily      | None                   | None                 | 1B.2      | USFS-Sensitive                | Chaparral, coastal scrub.   | Shaded foothill canyons; often on grassy slopes within other habitat. 420-760m   |
| <i>Acanthoscyphus parishii</i> var. <i>abramsii</i>   | Abrams' oxytheca           | None                   | None                 | 1B.2      | USFS-Sensitive                | Chaparral.  | Shale to sandy places. 1150-2060m.   |
| <i>Poa diaboli</i>                                    | Diablo Canyon blue grass   | None                   | None                 | 1B.2      | BLM-Sensitive                 | Chaparral (mesic sites), cismontane woodland, coastal scrub, closed-cone coniferous forest. | Shale, sometimes burned areas. 120-400m.   |
| <i>Astragalus lentiformis</i>                         | lens-pod milk-vetch        | None                   | None                 | 1B.2      | BLM-Sensitive; USFS-Sensitive | Great Basin scrub, lower montane coniferous forest.   | Shallow, volcanic soils among sagebrush, sometimes with Jeffrey pine. 1450-1925m.                                      |
| <i>Phlox dolichantha</i>                              | Big Bear Valley phlox      | None                   | None                 | 1B.2      | USFS-Sensitive                | Pebble plains, upper montane coniferous forest.   | Sloping hillsides, in shade under pines and <i>Q. kelloggii</i> , with heavy pine litter; also in openings. 2000-2970m |
| <i>Sidalcea robusta</i>                               | Butte County checkerbloom  | None                   | None                 | 1B.2      | BLM-Sensitive                 | Chaparral, cismontane woodland.   | Small draws and rocky crevices. 85-335m.   |
| <i>Malacothamnus hallii</i>                           | Hall's bush-mallow         | None                   | None                 | 1B.2      |                               | Chaparral.  | Some populations on serpentine. 10-550m.   |
| <i>Monardella nana</i> ssp. <i>leptosiphon</i>        | San Felipe monardella      | None                   | None                 | 1B.2      | USFS-Sensitive                | Chaparral, lower montane coniferous forest.   | Sometimes in openings and fuelbreaks or in the understory of forest or chaparral. 1200-1855m.                          |
| <i>Balsamorhiza macrolepis</i> var. <i>macrolepis</i> | big-scale balsamroot       | None                   | None                 | 1B.2      | BLM-Sensitive; USFS-Sensitive | Valley and foothill grassland, cismontane woodland.   | Sometimes on serpentine. 35-1000m.   |
| <i>Cirsium andrewsii</i>                              | Franciscan thistle         | None                   | None                 | 1B.2      |                               | Coastal bluff scrub, broadleaved upland forest, coastal scrub.                              | Sometimes serpentine seeps. 0-135m.  |
| <i>Monardella frutescens</i>                          | San Luis Obispo monardella | None                   | None                 | 1B.2      | BLM-Sensitive                 | Coastal dunes, coastal scrub.   | Stabilized sand of the immediate coast. 10-100m.   |
| <i>Xylorhiza cognata</i>                              | Mecca-aster                | None                   | None                 | 1B.2      | BLM-Sensitive                 | Sonoran desert scrub.   | Steep canyon slopes, in sandstone and clay. 20-305m.   |
| <i>Packera eurycephala</i> var. <i>lewisrosei</i>     | Lewis Rose's ragwort       | None                   | None                 | 1B.2      | BLM-Sensitive; USFS-Sensitive | Cismontane woodland, lower montane coniferous forest, chaparral.                            | Steep slopes and in canyons in serpentine soil, often along or near roads. 420-1515m.                                  |
| <i>Eriogonum umbellatum</i> var. <i>torreyanum</i>    | Donner Pass buckwheat      | None                   | None                 | 1B.2      | USFS-Sensitive                | Upper montane coniferous forest, chaparral, meadows.  | Steep slopes and ridgetops; rocky, volcanic soils; usually in bare or sparsely vegetated areas. 1840-2620m.            |
| <i>Erythronium taylorii</i>                           | Pilot Ridge fawn lily      | None                   | None                 | 1B.2      | USFS-Sensitive                | Lower montane coniferous forest.  | Steep, metamorphic rock outcrops in Douglas-fir/mixed conifer/black oak forest. 1340-1400m.                            |
| <i>Astragalus douglasii</i> var. <i>perstrictus</i>   | Jacumba milk-vetch         | None                   | None                 | 1B.2      | BLM-Sensitive; USFS-Sensitive | Chaparral, cismontane woodland, valley and foothill grassland.                              | Stony hillsides and gravelly or sandy flats in open oak woodland. 900-1370m.   |
| <i>Astragalus lentiginosus</i> var. <i>sierrae</i>    | Big Bear Valley milk-vetch | None                   | None                 | 1B.2      | USFS-Sensitive                | Mojavean desert scrub, meadows, pinyon-juniper woodland, upper montane coniferous forest.   | Stony meadows and open pinewoods; sandy and gravelly soils in a variety of habitats. 1800-2600m.                       |
| <i>Wyethia reticulata</i>                             | El Dorado County mule ears | None                   | None                 | 1B.2      | BLM-Sensitive                 | Chaparral, cismontane woodland, lower montane coniferous forest.                            | Stony red clay and gabbroic soils; often in openings in gabbro chaparral. 180-630m.                                    |
| <i>Penstemon californicus</i>                         | California beardtongue     | None                   | None                 | 1B.2      | USFS-Sensitive                | Chaparral, lower montane coniferous forest, pinyon-juniper woodland.                        | Stony slopes and shrubby openings; sandy or granitic soils. 1160-2300m.  |
| <i>Tetracoccus dioicus</i>                            | Parry's tetracoccus        | None                   | None                 | 1B.2      | BLM-Sensitive; USFS-Sensitive | Chaparral, coastal scrub.   | Stony, decomposed gabbro soil. 150-1000m.  |
| <i>Malacothamnus palmeri</i> var. <i>involucratus</i> | Carmel Valley bush-mallow  | None                   | None                 | 1B.2      | BLM-Sensitive; USFS-Sensitive | Cismontane woodland, chaparral.   | Talus hilltops and slopes, sometimes on serpentine. Burn dependent. 30-1100m.  |

Table J-2b. Plant Species Considered in this EIR (Upland species)

| Scientific Name   | Common name                   | Federal listing status | Calif listing status | CNPS List | Other Status                  | General Habitat   | Micro-Habitat   |
|---|-------------------------------|------------------------|----------------------|-----------|-------------------------------|---|---|
| <i>Harmonia stebbinsii</i>                                | Stebbins' harmonia            | None                   | None                 | 1B.2      | BLM-Sensitive; USFS-Sensitive | Chaparral, lower montane coniferous forest.   | Ultramafic soils, often along roads. 400-1580m.   |
| <i>Helianthella castanea</i>                              | Diablo helianthella           | None                   | None                 | 1B.2      | BLM-Sensitive                 | Broadleaved upland forest, chaparral, cismontane woodland, coastal scrub, riparian woodland, valley & foothill grassland. | Usually in chaparral/oak woodland interface in rocky, azonal soils. Often in partial shade. 25-1150m.                 |
| <i>Erigeron supplex</i>                                   | supple daisy                  | None                   | None                 | 1B.2      |                               | Coastal bluff scrub, coastal prairie.   | Usually in grassy sites. 5-50m.   |
| <i>Ivesia aperta</i> var. <i>aperta</i>                   | Sierra Valley ivesia          | None                   | None                 | 1B.2      | BLM-Sensitive; USFS-Sensitive | Great Basin scrub, pinyon and juniper woodland, lower montane coniferous forest, meadows.                                 | Usually in loamy soils derived from volcanics. Grassy areas w/in sagebrush scrub or other communities. 1475-2300m.    |
| <i>Carex obispoensis</i>                                  | San Luis Obispo sedge         | None                   | None                 | 1B.2      | BLM-Sensitive; USFS-Sensitive | Closed-cone coniferous forest, chaparral, coastal prairie, coastal scrub, valley and foothill grassland.                  | Usually in transition zone on sand, clay, or serpentine; in seeps. 5-790m.  |
| <i>Fritillaria pluriflora</i>                             | adobe-lily                    | None                   | None                 | 1B.2      | BLM-Sensitive                 | Chaparral, cismontane woodland, foothill grassland.   | Usually on clay soils; sometimes serpentine. 55-820m.   |
| <i>Penstemon personatus</i>                               | closed-throated beardtongue   | None                   | None                 | 1B.2      | BLM-Sensitive; USFS-Sensitive | Lower montane coniferous forest, upper montane coniferous forest, chaparral.  | Usually on N-facing slopes in metavolcanic soils. 1330-2120m.   |
| <i>Linanthus killipii</i>                                 | Baldwin Lake linanthus        | None                   | None                 | 1B.2      | USFS-Sensitive                | Alkaline meadows, pebble plain, pinyon-juniper woodland, upper montane coniferous forest.                                 | Usually on pebble plains with other rare species. 1700-2400m.   |
| <i>Lessingia micradenia</i> var. <i>micradenia</i>        | Tamalpais lessingia           | None                   | None                 | 1B.2      |                               | Chaparral, valley and foothill grassland.   | Usually on serpentine, in serpentine grassland or serpentine chaparral. often on roadsides. 100-305m.                 |
| <i>Ivesia sericoleuca</i>                                 | Plumas ivesia                 | None                   | None                 | 1B.2      | BLM-Sensitive; USFS-Sensitive | Great Basin scrub, lower montane coniferous forest, meadows, vernal pools.  | Vernally mesic areas; usually volcanic substrates. 1450-2000m.  |
| <i>Astragalus pulsiferae</i> var. <i>suksdorfii</i>       | Suksdorf's milk-vetch         | None                   | None                 | 1B.2      | BLM-Sensitive; USFS-Sensitive | Great Basin scrub, lower montane coniferous forest, pinyon and juniper woodland.  | Volcanic or clay soil; often gravelly or rocky. 1300-1930m.   |
| <i>Streptanthus oliganthus</i>                            | Masonic Mountain jewel-flower | None                   | None                 | 1B.2      | BLM-Sensitive; USFS-Sensitive | Pinyon-juniper woodland.  | Volcanic or decomposed granite soils, along roadsides and in old mine dumps. 1965-3050m.                              |
| <i>Allium tribracteatum</i>                               | three-bracted onion           | None                   | None                 | 1B.2      | USFS-Sensitive                | Chaparral, lower montane coniferous forest, upper montane coniferous forest.  | Volcanic slopes and ridges. 1100-2750m.   |
| <i>Astragalus pulsiferae</i> var. <i>pulsiferae</i>       | Pulsifer's milk-vetch         | None                   | None                 | 1B.2      | BLM-Sensitive; USFS-Sensitive | Great Basin scrub, lower montane coniferous forest, pinyon-juniper woodland.  | Volcanic substrate, sometimes in clay; sandy or rocky soil, often with pines or sagebrush. 1340-1880m.                |
| <i>Eschscholzia minutiflora</i> ssp. <i>twisselmannii</i> | Red Rock poppy                | None                   | None                 | 1B.2      | BLM-Sensitive                 | Mojavean desert scrub.  | Volcanic tuff; with Larrea, Lycium, Eriogonum, Isomeris, Hemizonia. 680-1230m.  |
| <i>Navarretia peninsularis</i>                            | Baja navarretia               | None                   | None                 | 1B.2      | USFS-Sensitive                | Lower montane coniferous forest, chaparral.   | Wet areas in open forest. 1500-2425m.   |
| <i>Mimulus filicaulis</i>                                 | slender-stemmed monkeyflower  | None                   | None                 | 1B.2      | BLM-Sensitive; USFS-Sensitive | Cismontane woodland, lower montane coniferous forest, meadows and seeps, upper montane coniferous forest.                 | Within the transition zone of the Sierra Nevada, moist granitic sand and meadow edges; vernal mesic sites. 680-1750m. |
| <i>Penstemon sudans</i>                                   | Susanville beardtongue        | None                   | None                 | 1B.3      | BLM-Sensitive; USFS-Sensitive | Great Basin scrub, lower montane coniferous forest, pinyon-juniper woodland.  | 1200-1775m.   |
| <i>Allium howellii</i> var. <i>clokeyi</i>                | Mt. Pinos onion               | None                   | None                 | 1B.3      | USFS-Sensitive                | Great Basin scrub, pinyon-juniper woodland.   | 1300-1850m.   |
| <i>Erythronium howellii</i>                               | Howell's fawn lily            | None                   | None                 | 1B.3      |                               | Lower montane coniferous forest.  | 200-1145m.  |
| <i>Cordylanthus eremicus</i> ssp. <i>kernensis</i>        | Kern Plateau bird's-beak      | None                   | None                 | 1B.3      | USFS-Sensitive                | Upper montane coniferous forest, pinyon-juniper woodland.   | 2100-3000m.   |
| <i>Botrychium lineare</i>                                 | slender moonwort              | None                   | None                 | 1B.3      | USFS-Sensitive                | Upper coniferous forest.  | 2600m.  |
| <i>Senecio pattersonensis</i>                             | Mount Patterson senecio       | None                   | None                 | 1B.3      | USFS-Sensitive                | Alpine boulder and rock field.  | 2900-3700m.   |
| <i>Eriogonum hoffmannii</i> var. <i>robustius</i>         | robust Hoffmann's buckwheat   | None                   | None                 | 1B.3      |                               | Mojavean desert scrub, pinyon and juniper woodland.   | 300-750m.   |
| <i>Clarkia borealis</i> ssp. <i>borealis</i>              | northern clarkia              | None                   | None                 | 1B.3      | BLM-Sensitive; USFS-Sensitive | Chaparral, cismontane woodland, lower montane coniferous forest.  | 400-800m.   |

Table J-2b. Plant Species Considered in this EIR (Upland species)

| Scientific Name  | Common name                      | Federal listing status | Calif listing status | CNPS List | Other Status                  | General Habitat  | Micro-Habitat   |
|--|----------------------------------|------------------------|----------------------|-----------|-------------------------------|--|---|
| <i>Camissonia integrifolia</i>                         | Kern River evening-primrose      | None                   | None                 | 1B.3      | BLM-Sensitive                 | Chaparral.   | 700-1000m.  |
| <i>Mentzelia tridentata</i>                            | creamy blazing star              | None                   | None                 | 1B.3      | BLM-Sensitive                 | Mojavean desert scrub.   | 700-1160m.  |
| <i>Palafoxia arida</i> var. <i>gigantea</i>            | giant spanish-needle             | None                   | None                 | 1B.3      | BLM-Sensitive                 | Desert dunes.  | Active and stable dune areas; assoc. with <i>Ammobroma sonorae</i> , <i>Astragalus lent. borreganus</i> , etc. 15-100m. |
| <i>Lessingia glandulifera</i> var. <i>tomentosa</i>    | Warner Springs lessingia         | None                   | None                 | 1B.3      | USFS-Sensitive                | Chaparral.   | Along roadsides, sandy soil, in high desert chaparral. 860-1220m.   |
| <i>Ribes canthariforme</i>                             | Moreno currant                   | None                   | None                 | 1B.3      | BLM-Sensitive; USFS-Sensitive | Chaparral.   | Among boulders in oak-manzanita thickets; shaded or partially shaded sites. 340-1200m.                                  |
| <i>Salvia gregatae</i>                                 | Orocopia sage                    | None                   | None                 | 1B.3      | BLM-Sensitive                 | Mojavean desert scrub, Sonoran desert scrub.   | Broad alluvial bajadas and fans adjacent to desert washes in gravelly or rocky soil, rocky slopes of canyons. -40-825m. |
| <i>Chorizanthe blakleyi</i>                            | Blakley's spineflower            | None                   | None                 | 1B.3      | USFS-Sensitive                | Chaparral.   | Closely related to <i>C. palmeri</i> . 600-1600m.   |
| <i>Hulsea californica</i>                              | San Diego hulsea                 | None                   | None                 | 1B.3      |                               | Lower montane coniferous forest, upper montane coniferous forest, chaparral.   | Coarse to fine sandy loam in disturbed chaparral openings at high elevations. 1000-2915m.                               |
| <i>Lotus haydonii</i>                                  | pygmy lotus                      | None                   | None                 | 1B.3      |                               | Sonoran desert scrub, pinyon-juniper woodland.   | Creosote bush scrub to pinyon-juniper woodland; rocky sites. 600-1200m.   |
| <i>Ivesia longibracteata</i>                           | Castle Crags ivesia              | None                   | None                 | 1B.3      | BLM-Sensitive; USFS-Sensitive | Lower montane coniferous forest.   | Crevices in granitic cliffs. About 1365m.   |
| <i>Penstemon newberryi</i> var. <i>sonomensis</i>      | Sonoma beardtongue               | None                   | None                 | 1B.3      |                               | Chaparral.   | Crevices in rock outcrops and talus slopes. 180-1390m.  |
| <i>Carliquinia muirii</i>                              | Muir's tarplant                  | None                   | None                 | 1B.3      | BLM-Sensitive; USFS-Sensitive | Chaparral, lower montane coniferous forest, upper montane coniferous forest.   | Crevices of granite ledges and dry sandy soils. 1100-2500m.   |
| <i>Lupinus peirsonii</i>                               | Peirson's lupine                 | None                   | None                 | 1B.3      | USFS-Sensitive                | Joshua tree woodland, pinyon-juniper woodland, upper montane coniferous forest.  | Decomposed granite slide and talus, on slopes and ridges. 1000-2000m.   |
| <i>Calochortus simulans</i>                            | San Luis Obispo mariposa lily    | None                   | None                 | 1B.3      | BLM-Sensitive; USFS-Sensitive | Valley and foothill grassland, cismontane woodland, chaparral.   | Decomposed granite. 395-1100m.  |
| <i>Leptosiphon floribundus</i> ssp. <i>hallii</i>      | Santa Rosa Mountains leptosiphon | None                   | None                 | 1B.3      | USFS-Sensitive                | Sonoran desert scrub.  | Desert canyons. 900-1275m.  |
| <i>Eriogonum kennedyi</i> var. <i>alpigenum</i>        | southern alpine buckwheat        | None                   | None                 | 1B.3      | USFS-Sensitive                | Alpine boulder and rock fields, subalpine coniferous forest.   | Dry granitic gravel. 2600-3500m.  |
| <i>Penstemon stephensii</i>                            | Stephens' beardtongue            | None                   | None                 | 1B.3      | BLM-Sensitive                 | Mojavean desert scrub, pinyon-juniper woodland.  | Dry granitic or limestone rocky slopes and crevices. 1160-2120m.  |
| <i>Acanthoscyphus parishii</i> var. <i>cienezensis</i> | Cienega Seca oxytheca            | None                   | None                 | 1B.3      | USFS-Sensitive                | Upper montane coniferous forest.   | Dry gravelly banks and granitic sand. 2090-2450m.   |
| <i>Viola pinetorum</i> ssp. <i>grisea</i>              | grey-leaved violet               | None                   | None                 | 1B.3      | USFS-Sensitive                | Subalpine coniferous forest, upper montane coniferous forest.  | Dry mountain peaks and slopes. 1800-2600m.  |
| <i>Minuartia howellii</i>                              | Howell's sandwort                | None                   | None                 | 1B.3      | BLM-Sensitive                 | Lower montane coniferous forest, chaparral.  | Dry open places, often on serpentine hillsides and ridges, near Jeffrey pines. 550-1000m.                               |
| <i>Eriogonum gilmanii</i>                              | Gilman's buckwheat               | None                   | None                 | 1B.3      |                               | Mojavean desert scrub.   | Dry rocky places in desert mountains. 1800-2000m.   |
| <i>Penstemon tracyi</i>                                | Tracy's beardtongue              | None                   | None                 | 1B.3      |                               | Upper montane coniferous forest.   | Dry rocky ridges, ledges, and cliffs, often in crevices. 1785-2145m.  |
| <i>Eriogonum hirtellum</i>                             | Klamath Mountain buckwheat       | None                   | None                 | 1B.3      | USFS-Sensitive                | Lower montane coniferous forest, upper montane coniferous forest.  | Dry serpentine rocky outcrops and ridges. 600-1900m.  |
| <i>Monardella macrantha</i> ssp. <i>hallii</i>         | Hall's monardella                | None                   | None                 | 1B.3      | USFS-Sensitive                | Broadleaved upland forest, chaparral, lower montane coniferous forest, cismontane woodland, valley & foothill grassland. | Dry slopes and ridges in openings within the above communities. 695-2195m.  |
| <i>Astragalus lentiginosus</i> var. <i>antonius</i>    | San Antonio milk-vetch           | None                   | None                 | 1B.3      | USFS-Sensitive                | Lower montane coniferous forest, upper montane coniferous forest.  | Dry slopes in open yellow pine forest. 1500-2600m.  |
| <i>Erigeron inornatus</i> var. <i>keillii</i>          | keil's daisy                     | None                   | None                 | 1B.3      |                               | Meadows, lower montane coniferous forest.  | Dry slopes, meadows, in coniferous forest. 695-1820m.   |
| <i>Penstemon filiformis</i>                            | thread-leaved beardtongue        | None                   | None                 | 1B.3      | BLM-Sensitive; USFS-Sensitive | Cismontane woodland, lower montane coniferous forest, meadows and seeps.   | Dry stony sites, grassy openings, & meadows, often along trails & logging roads; sometimes on serpentine. 450-2125m.    |
| <i>Petalonyx thurberi</i> ssp. <i>gilmanii</i>         | Death Valley sandpaper-plant     | None                   | None                 | 1B.3      | BLM-Sensitive                 | Desert dunes, Mojavean desert scrub.   | Dry washes and slopes. 255-1445m.   |
| <i>Lupinus excubitus</i> var. <i>medius</i>            | Mountain Springs bush lupine     | None                   | None                 | 1B.3      | BLM-Sensitive                 | Pinyon and juniper woodland, Sonoran desert scrub.   | Dry, sandy, gently sloping canyon washes, sandy soil pockets, and flats in steeper slopes and drainages. 425-1370m.     |

**Table J-2b. Plant Species Considered in this EIR (Upland species)**

| Scientific Name                                    | Common name                        | Federal listing status | Calif listing status | CNPS List | Other Status                  | General Habitat   | Micro-Habitat  |
|--|------------------------------------|------------------------|----------------------|-----------|-------------------------------|---|--|
| <i>Potentilla glandulosa</i> ssp. <i>ewanii</i>    | Ewan's cinquefoil                  | None                   | None                 | 1B.3      | USFS-Sensitive                | Lower montane coniferous forest.  | Edges of seeps and springs, small waterways. 1900-2400m.   |
| <i>Ericameria cuneata</i> var. <i>macrocephala</i> | Laguna Mountains goldenbush        | None                   | None                 | 1B.3      |                               | Chaparral.  | Endemic to the Laguna Mountains. Among boulders; in crevices in granitic outcrops and in rocky soil. 1185-1850m.       |
| <i>Draba incassata</i>                             | Sweetwater Mountains draba         | None                   | None                 | 1B.3      | USFS-Sensitive                | Alpine boulder and rock field.  | Endemic to the rhyolite substrates of the Sweetwater Mtns, on loose, steep talus slopes. 2500-3500m.                   |
| <i>Galium clementis</i>                            | Santa Lucia bedstraw               | None                   | None                 | 1B.3      | USFS-Sensitive                | Lower montane coniferous forest, upper montane coniferous forest.   | Forming soft mats in shady rocky patches; on granite or serpentine; mostly on exposed peaks. 1130-1780m.               |
| <i>Streptanthus fenestratus</i>                    | Tehipite Valley jewel-flower       | None                   | None                 | 1B.3      | USFS-Sensitive                | Lower montane coniferous forest, upper montane coniferous forest.   | Granite gravels and dry open sandy areas. 605-1760m.   |
| <i>Iris munzii</i>                                 | Munz's iris                        | None                   | None                 | 1B.3      | BLM-Sensitive                 | Cismontane woodland.  | Granitic moist sandy loam soil, often along streams. 335-800m.   |
| <i>Monardella beneolens</i>                        | sweet-smelling monardella          | None                   | None                 | 1B.3      | BLM-Sensitive; USFS-Sensitive | Alpine boulder and rock field, subalpine coniferous forest, upper montane coniferous forest.                            | Granitic soils; open conifer forest with <i>Eriogonum</i> spp., <i>Trifolium</i> , <i>Erigeron</i> , etc. 2500-3500m.  |
| <i>Sidalcea hickmanii</i> ssp. <i>hickmanii</i>    | Hickman's checkerbloom             | None                   | None                 | 1B.3      | USFS-Sensitive                | Chaparral.  | Grassy openings in chaparral, and on dry ridges. 330-1640m.  |
| <i>Streptanthus gracilis</i>                       | alpine jewel-flower                | None                   | None                 | 1B.3      | USFS-Sensitive                | Subalpine coniferous forest, upper montane coniferous forest.   | Gravel pockets among granitic outcrops and talus boulders. 2800-3500m.   |
| <i>Trifolium dedeckeriae</i>                       | Dedecker's clover                  | None                   | None                 | 1B.3      | BLM-Sensitive; USFS-Sensitive | Pinyon-juniper woodland, subalpine coniferous forest, upper montane coniferous forest, lower montane coniferous forest. | Gravelly canyons and slopes, cracks in granite rock outcrops, and understory of pinyon pines. 2100-3500m.              |
| <i>Astragalus ravenii</i>                          | Raven's milk-vetch                 | None                   | None                 | 1B.3      | USFS-Sensitive                | Alpine boulder and rock field, upper montane coniferous forest.   | Gravelly flats and slopes on metamorphosed sedimentary and volcanic bedrock. 3355-3460.                                |
| <i>Cryptantha incana</i>                           | Tulare cryptantha                  | None                   | None                 | 1B.3      | USFS-Sensitive                | Lower montane coniferous forest.  | Gravelly or rocky sites. 1430-2000m.   |
| <i>Hulsea vestita</i> ssp. <i>pygmaea</i>          | pygmy hulsea                       | None                   | None                 | 1B.3      | USFS-Sensitive                | Alpine boulder and rock field, subalpine coniferous forest.   | Gravelly sites; on granite. 2835-3900m.  |
| <i>Polemonium chartaceum</i>                       | Mason's sky pilot                  | None                   | None                 | 1B.3      | USFS-Sensitive                | Alpine boulder and rock field, subalpine coniferous forest.   | Gravelly slopes and rocky ledges on granite or volcanic soils. 1800-4215m.   |
| <i>Astragalus anxius</i>                           | Ash Valley milk-vetch              | None                   | None                 | 1B.3      | BLM-Sensitive; USFS-Sensitive | Great Basin scrub, pinyon and juniper woodland, upper montane coniferous forest.  | Gravelly, shallow, volcanic soils. 1550-1645m.   |
| <i>Galium angustifolium</i> ssp. <i>onycense</i>   | Onyx Peak bedstraw                 | None                   | None                 | 1B.3      |                               | Cismontane woodland.  | Grows from under and between large granite rocks and outcrops with scattered grey pines and oaks. 950-2300m.           |
| <i>Horkelia truncata</i>                           | Ramona horkelia                    | None                   | None                 | 1B.3      | USFS-Sensitive                | Chaparral, cismontane woodland.   | Habitats in California include: mixed chaparral, vernal streams, and disturbed areas near roads. Clay soil. 400-1300m. |
| <i>Oreonana vestita</i>                            | woolly mountain-parsley            | None                   | None                 | 1B.3      | USFS-Sensitive                | Subalpine coniferous forest, upper montane coniferous forest.   | High ridges; on scree, talus, or gravel. 2410-3500m.   |
| <i>Tauschia howellii</i>                           | Howell's tauschia                  | None                   | None                 | 1B.3      | USFS-Sensitive                | Subalpine coniferous forest, upper montane coniferous forest.   | Hot dry ridge summits and slopes in decomposed granite gravel and red sand. 1705-2500m.                                |
| <i>Draba sierrae</i>                               | Sierra draba                       | None                   | None                 | 1B.3      |                               | Alpine boulder and rock field.  | In coarse sandy and gravelly soil; granitic or carbonate substrate. 3500-4265m.  |
| <i>Phacelia mustelina</i>                          | Death Valley round-leaved phacelia | None                   | None                 | 1B.3      | BLM-Sensitive; USFS-Sensitive | Pinyon-juniper woodland; Mojavean desert scrub.   | In crevices on the face of limestone cliffs, on volcanic outcrops, and in gravel talus. 725-2620m.                     |
| <i>Dudleya saxosa</i> ssp. <i>saxosa</i>           | Panamint dudleya                   | None                   | None                 | 1B.3      | BLM-Sensitive                 | Mojavean desert scrub, pinyon and juniper woodland.   | In exposed crevices of cliffs and rocks, on decomposed granite or on limestone. 1100-2200m.                            |
| <i>Galium californicum</i> ssp. <i>lucifense</i>   | Cone Peak bedstraw                 | None                   | None                 | 1B.3      | USFS-Sensitive                | Broadleaved upland forest, lower montane coniferous forest, cismontane woodland.  | In forest duff or gravelly talus of pine and oak forest, in partial shade. 875-1525m.                                  |
| <i>Campanula shetleri</i>                          | Castle Crags harebell              | None                   | None                 | 1B.3      | BLM-Sensitive; USFS-Sensitive | Lower montane coniferous forest.  | In protected rock crevices in granite. 1210-1830m.   |
| <i>Arabis bodiensis</i>                            | Bodie Hills rock-cress             | None                   | None                 | 1B.3      | BLM-Sensitive; USFS-Sensitive | Alpine boulder and rock field, Great Basin scrub, pinyon-juniper woodland, subalpine coniferous forest.                 | In rock crevices, outcrops, and on steep slopes. Granite and volcanic substrates. 2195-3530m.                          |
| <i>Ribes tularense</i>                             | Sequoia gooseberry                 | None                   | None                 | 1B.3      | BLM-Sensitive                 | Lower montane coniferous forest, upper montane coniferous forest.   | In sandy loam derived from granitics or deep clays. With <i>Abies</i> , <i>Pinus</i> , <i>Ribes</i> , etc. 1500-2075m. |
| <i>Allium shevockii</i>                            | Spanish Needle onion               | None                   | None                 | 1B.3      | BLM-Sensitive                 | Pinyon-juniper woodland, upper montane coniferous forest.   | In soil pockets on rock outcrops and talus slopes; bulbs mostly on margins of outcrops. 2000-2300m.                    |

Table J-2b. Plant Species Considered in this EIR (Upland species)

| Scientific Name                                       | Common name                    | Federal listing status | Calif listing status | CNPS List | Other Status                  | General Habitat   | Micro-Habitat  |
|---|--------------------------------|------------------------|----------------------|-----------|-------------------------------|---|--|
| <i>Petrophyton caespitosum</i> ssp. <i>acuminatum</i> | marble rockmat                 | None                   | None                 | 1B.3      | USFS-Sensitive                | Lower montane coniferous forest, upper montane coniferous forest.   | Limestone or granite, rocky sites. 1200-2300m.   |
| <i>Dacryophyllum falcifolium</i>                      | tear drop moss                 | None                   | None                 | 1B.3      |                               | Coast redwood forest.   | Limestone substrates and rock outcrops. 50-275m.   |
| <i>Heterotheca monarchensis</i>                       | Monarch golden-aster           | None                   | None                 | 1B.3      | USFS-Sensitive                | Cismontane woodland.  | Limestone. 1095-1850m.   |
| <i>Fritillaria brandegeei</i>                         | Greenhorn fritillary           | None                   | None                 | 1B.3      |                               | Lower montane coniferous forest.  | Loamy, granitic soils; often in mixed conifer-black oak community. 1200-1910m.                                   |
| <i>Potentilla morefieldii</i>                         | Morefield's cinquefoil         | None                   | None                 | 1B.3      | USFS-Sensitive                | Alpine boulder and rock field.  | Low areas in alpine calcareous (or granite?) rocks. 3300-4100m.  |
| <i>Mimulus norrisii</i>                               | Kaweah monkeyflower            | None                   | None                 | 1B.3      | BLM-Sensitive                 | Chaparral, cismontane woodland.   | Marble outcrops, soil pockets, moss-covered ledges, cracks in outcrops, sometimes on S-facing cliffs. 360-1300m. |
| <i>Erysimum insulare</i> ssp. <i>insulare</i>         | island wallflower              | None                   | None                 | 1B.3      |                               | Coastal bluff scrub, coastal dunes.   | Mesas and cliffs. 0-180m.  |
| <i>Symphotrichum greatae</i>                          | Greata's aster                 | None                   | None                 | 1B.3      |                               | Chaparral, cismontane woodland.   | Mesic canyons. 800-1500m.  |
| <i>Lewisia longipetala</i>                            | long-petaled lewisia           | None                   | None                 | 1B.3      | USFS-Sensitive                | Alpine boulder and rock field, subalpine coniferous forest.   | Mesic rocky sites; in cracks of granite or gravelly volcanic soils. 2480-2925m.                                  |
| <i>Delphinium umbraculorum</i>                        | umbrella larkspur              | None                   | None                 | 1B.3      | BLM-Sensitive; USFS-Sensitive | Cismontane woodland.  | Mesic sites. 400-1600m.  |
| <i>Githopsis tenella</i>                              | delicate bluecup               | None                   | None                 | 1B.3      |                               | Chaparral, cismontane woodland.   | Mesic sites. 1100-1900m.   |
| <i>Lupinus lepidus</i> var. <i>culbertsonii</i>       | Hockett Meadows lupine         | None                   | None                 | 1B.3      | USFS-Sensitive                | Meadows, upper montane coniferous forest.   | Mesic, rocky sites. One site states: "level, dry site, surrounded by Jeffrey pines." 2425-3000m.                 |
| <i>Horkelia tularensis</i>                            | Kern Plateau horkelia          | None                   | None                 | 1B.3      | USFS-Sensitive                | Upper montane coniferous forest.  | Metamorphic gravel along an exposed ridge top. 2280-2875m.   |
| <i>Streptanthus glandulosus</i> var. <i>hoffmanii</i> | Hoffman's bristly jewel-flower | None                   | None                 | 1B.3      | BLM-Sensitive                 | Chaparral, cismontane woodland, valley and foothill grassland.  | Moist, steep rocky banks, in serpentine and non-serpentine soil. 120-475m.                                       |
| <i>Orthotrichum spjutii</i>                           | Spjut's bristle moss           | None                   | None                 | 1B.3      |                               | Lower montane coniferous forest, pinyon-juniper woodland, subalpine coniferous forest, upper montane coniferous forest. | Moss growing on granitic rock; known only from near Sonora Pass. 2100-2400m.                                     |
| <i>Orthotrichum shevockii</i>                         | Shevock's bristle moss         | None                   | None                 | 1B.3      | BLM-Sensitive                 | Joshua tree woodland, pinyon-juniper woodland.  | Moss growing on granitic rocks. 750-2100m.   |
| <i>Entosthodon kochii</i>                             | Koch's cord moss               | None                   | None                 | 1B.3      |                               | Cismontane woodland.  | Moss growing on soil. 500-1000m.   |
| <i>Mielichhoferia tehamentensis</i>                   | Lassen Peak copper moss        | None                   | None                 | 1B.3      |                               | Alpine boulder and rock field.  | Moss on volcanic rock and soil; mesic sites. 2500-2800m.   |
| <i>Horkelia hispida</i>                               | White Mountains horkelia       | None                   | None                 | 1B.3      | USFS-Sensitive                | Great Basin scrub, subalpine coniferous forest, alpine dwarf scrub.   | Mostly in ancient bristlecone forest. 3000-3400m.  |
| <i>Clarkia rostrata</i>                               | beaked clarkia                 | None                   | None                 | 1B.3      | BLM-Sensitive                 | Cismontane woodland, valley and foothill grassland.   | North-facing slopes; sometimes on sandstone. 60-460m.  |
| <i>Heuchera hirsutissima</i>                          | shaggy-haired alumroot         | None                   | None                 | 1B.3      | USFS-Sensitive                | Subalpine coniferous forest, upper montane coniferous forest.   | Often near large rocks. 1500-3500m.  |
| <i>Chorizanthe rectispina</i>                         | straight-awned spineflower     | None                   | None                 | 1B.3      | BLM-Sensitive; USFS-Sensitive | Chaparral, cismontane woodland, coastal scrub.  | Often on granite in chaparral. 355-1035m.  |
| <i>Clarkia mildrediae</i> ssp. <i>mildrediae</i>      | Mildred's clarkia              | None                   | None                 | 1B.3      | BLM-Sensitive; USFS-Sensitive | Cismontane woodland, lower montane coniferous forest.   | On decomposed granite; sometimes on roadsides. 245-1710m.  |
| <i>Erigeron aequifolius</i>                           | Hall's daisy                   | None                   | None                 | 1B.3      | BLM-Sensitive; USFS-Sensitive | Broadleaved upland forest, lower montane coniferous forest, pinyon & juniper woodland, upper montane coniferous forest. | On dry rock outcrops in granite walls and canyons. 1500-2440m.   |
| <i>Monardella linoides</i> ssp. <i>oblonga</i>        | Tehachapi monardella           | None                   | None                 | 1B.3      | BLM-Sensitive; USFS-Sensitive | Lower montane coniferous forest, upper montane coniferous forest, pinyon-juniper woodland.                              | On dry slopes of yellow pine forest, decomposed granitic soils; also in roadside disturbed areas. 1695-2470m.    |
| <i>Cryptantha crymophila</i>                          | subalpine cryptantha           | None                   | None                 | 1B.3      |                               | Subalpine coniferous forest.  | On dry talus of volcanic formation. 2600-3200m.  |
| <i>Calycadenia hooveri</i>                            | Hoover's calycadenia           | None                   | None                 | 1B.3      | BLM-Sensitive                 | Cismontane woodland, valley and foothill grassland.   | On exposed, rocky, barren soil. 65-260m.   |
| <i>Erythronium pusaterii</i>                          | Kaweah fawn lily               | None                   | None                 | 1B.3      | USFS-Sensitive                | Subalpine coniferous forest, meadows.   | On granitic loam soils and granite outcrops; also on metamorphics. 2200-2775m.                                   |
| <i>Cardamine nuttallii</i> var. <i>gemmata</i>        | yellow-tubered toothwort       | None                   | None                 | 1B.3      |                               | Lower montane coniferous forest, North Coast coniferous forest.   | On serpentine in a variety of aspects. 100-700m.   |
| <i>Draba aureola</i>                                  | golden alpine draba            | None                   | None                 | 1B.3      |                               | Alpine boulder and rock field, subalpine coniferous forest.   | On serpentine or volcanic outcrops. 2000-3355m.  |
| <i>Cryptantha mariposae</i>                           | Mariposa cryptantha            | None                   | None                 | 1B.3      | BLM-Sensitive                 | Chaparral.  | On serpentine outcrops. 200-650m.  |
| <i>Galium hardhamiae</i>                              | Hardham's bedstraw             | None                   | None                 | 1B.3      | BLM-Sensitive; USFS-Sensitive | Closed-cone coniferous forest.  | On serpentine with <i>Cupressus sargentii</i> . 390-975m.  |

Table J-2b. Plant Species Considered in this EIR (Upland species)

| Scientific Name                               | Common name                    | Federal listing status | Calif listing status | CNPS List | Other Status                  | General Habitat   | Micro-Habitat  |
|---|--------------------------------|------------------------|----------------------|-----------|-------------------------------|---|--|
| <i>Delphinium purpusii</i>                    | rose-flowered larkspur         | None                   | None                 | 1B.3      | BLM-Sensitive                 | Chaparral, cismontane woodland, pinyon-juniper woodland.  | On shady rocky slopes, often on carbonates. 300-1300m.   |
| <i>Epilobium siskiyouense</i>                 | Siskiyou fireweed              | None                   | None                 | 1B.3      | BLM-Sensitive                 | Subalpine coniferous forest, upper montane coniferous forest.   | On slopes in gravelly, serpentine soils. 1700-2500m.   |
| <i>Draba cruciata</i>                         | Mineral King draba             | None                   | None                 | 1B.3      |                               | Subalpine coniferous forest.  | On steep rocky slopes with clayey soils, or sometimes on light sandy soils. 2500-3315m.                          |
| <i>Draba carnosula</i>                        | Mt. Eddy draba                 | None                   | None                 | 1B.3      | USFS-Sensitive                | Subalpine coniferous forest, upper montane coniferous forest.   | On talus or small boulder-fields; known from both serpentine and granite. 1920-2730m.                            |
| <i>Arabis tiehmii</i>                         | Tiehm's rock-cress             | None                   | None                 | 1B.3      | USFS-Sensitive                | Alpine boulder and rock field.  | On windswept rocky ridges and in crevices on rocky slopes; in cushion plant community on granite. 2970-3590m.    |
| <i>Lupinus antoninus</i>                      | Anthony Peak lupine            | None                   | None                 | 1B.3      | USFS-Sensitive                | Upper montane coniferous forest, lower montane coniferous forest.   | Open areas with surrounding forest; rocky sites. 1210-2285m.   |
| <i>Astragalus shevockii</i>                   | Shevock's milk-vetch           | None                   | None                 | 1B.3      | BLM-Sensitive; USFS-Sensitive | Upper montane coniferous forest.  | Open Jeffrey pine forest, in granitic sand or volcanic soils and in pine-needle duff. 1875-1965m.                |
| <i>Galium angustifolium ssp. jacinticum</i>   | San Jacinto Mountains bedstraw | None                   | None                 | 1B.3      | USFS-Sensitive                | Lower montane coniferous forest.  | Open mixed forest. 1630-1940m.   |
| <i>Chaenactis carphoclinia var. peirsonii</i> | Peirson's pincushion           | None                   | None                 | 1B.3      |                               | Sonoran desert scrub.   | Open rocky or sandy sites. 3-80m.  |
| <i>Anisocarpus scabridus</i>                  | scabrid alpine tarplant        | None                   | None                 | 1B.3      | BLM-Sensitive; USFS-Sensitive | Upper montane coniferous forest.  | Open stony ridges, metamorphic scree slopes of mountain peaks, and cliffs in or near red fir forest. 1650-2300m. |
| <i>Streptanthus callistus</i>                 | Mt. Hamilton jewel-flower      | None                   | None                 | 1B.3      | BLM-Sensitive                 | Chaparral, cismontane woodland.   | Open talus slopes on shale with grey pine and/or black oak. 600-790m.  |
| <i>Streptanthus campestris</i>                | southern jewel-flower          | None                   | None                 | 1B.3      | USFS-Sensitive                | Chaparral, lower montane coniferous forest, pinyon-juniper woodland.  | Open, rocky areas. 600-2790m.  |
| <i>Eremogone cliftonii</i>                    | Clifton's eremogone            | None                   | None                 | 1B.3      |                               | Lower montane coniferous forest, upper montane coniferous forest, chaparral.  | Openings; granitic substrates. 445-1770m.  |
| <i>Draba sharsmithii</i>                      | Mt. Whitney draba              | None                   | None                 | 1B.3      | USFS-Sensitive                | Alpine boulder and rock field.  | Protected rock crevices. 3330-3940m.   |
| <i>Sedum paradisum</i>                        | Canyon Creek stonecrop         | None                   | None                 | 1B.3      | BLM-Sensitive; USFS-Sensitive | Chaparral, lower montane coniferous forest, subalpine coniferous forest, broadleaved upland forest.                         | Rock faces, in crevices of exposed granite. 1060-1860m.  |
| <i>Monardella robisonii</i>                   | Robison's monardella           | None                   | None                 | 1B.3      | BLM-Sensitive                 | Pinyon-juniper woodland, Joshua tree woodland.  | Rocky desert slopes, often among granitic boulders. 1000-1500m.  |
| <i>Erythronium pluriflorum</i>                | Shuteye Peak fawn lily         | None                   | None                 | 1B.3      | USFS-Sensitive                | Upper montane coniferous forest, meadows, subalpine coniferous forest.  | Rocky granitic outcrops and slopes. 2060-2550m.  |
| <i>Penstemon calcareus</i>                    | limestone beardtongue          | None                   | None                 | 1B.3      |                               | Mojavean desert scrub, pinyon-juniper woodland, Joshua tree woodland.   | Rocky limestone cliffs and canyon bottoms. 1065-2040m.   |
| <i>Chorizanthe breweri</i>                    | Brewer's spineflower           | None                   | None                 | 1B.3      | BLM-Sensitive; USFS-Sensitive | Chaparral, cismontane woodland, coastal scrub, closed-cone coniferous forest.   | Rocky or gravelly serpentine sites; usually in barren areas. 45-800m.  |
| <i>Heuchera parishii</i>                      | Parish's alumroot              | None                   | None                 | 1B.3      | USFS-Sensitive                | Lower montane coniferous forest, subalpine coniferous forest, upper montane coniferous forest, alpine boulder & rock field. | Rocky places. 1500-3800m.  |
| <i>Eriogonum ursinum var. erubescens</i>      | blushing wild buckwheat        | None                   | None                 | 1B.3      | BLM-Sensitive; USFS-Sensitive | Lower montane coniferous forest, montane chaparral.   | Rocky sites including scree and talus. 1600-1900m.   |
| <i>Chaenactis parishii</i>                    | Parish's chaenactis            | None                   | None                 | 1B.3      |                               | Chaparral.  | Rocky sites. 1300-2500m.   |
| <i>Mentzelia inyoensis</i>                    | Inyo blazing star              | None                   | None                 | 1B.3      | BLM-Sensitive                 | Great Basin scrub, pinyon-juniper woodland.   | Rocky sites. 1150-1980m.   |
| <i>Draba corrugata var. saxosa</i>            | Southern California rock draba | None                   | None                 | 1B.3      | USFS-Sensitive                | Alpine boulder and rock fields, subalpine coniferous forest, upper montane coniferous forest.                               | Rocky sites. 2440-3600m.   |
| <i>Erigeron miser</i>                         | starved daisy                  | None                   | None                 | 1B.3      | USFS-Sensitive                | Upper montane coniferous forest.  | Rocky, granitic outcrops. 1755-2260m.  |
| <i>Allium sharsmithiae</i>                    | Sharsmith's onion              | None                   | None                 | 1B.3      |                               | Cismontane woodland.  | Rocky, serpentine slopes. 400-1200m.   |
| <i>Arabis koehleri var. stipitata</i>         | Koehler's stipitate rock-cress | None                   | None                 | 1B.3      | USFS-Sensitive                | Chaparral, lower montane coniferous forest.   | Rocky, serpentine substrate. 155-1810m.  |
| <i>Opuntia munzii</i>                         | Munz's cholla                  | None                   | None                 | 1B.3      | BLM-Sensitive                 | Sonoran desert scrub.   | Sandy and rocky desert flats and hills.  |
| <i>Eriogonum umbellatum var. glaberrimum</i>  | Warner Mountains buckwheat     | None                   | None                 | 1B.3      | BLM-Sensitive; USFS-Sensitive | Lower montane coniferous forest, upper montane coniferous forest.   | Sandy or gravelly sites. 1600-2300m.   |

Table J-2b. Plant Species Considered in this EIR (Upland species)

| Scientific Name                                     | Common name                | Federal listing status | Calif listing status | CNPS List | Other Status                  | General Habitat   | Micro-Habitat  |
|---|----------------------------|------------------------|----------------------|-----------|-------------------------------|---|--|
| <i>Gilia leptantha</i> ssp. <i>leptantha</i>        | San Bernardino gilii       | None                   | None                 | 1B.3      | USFS-Sensitive                | Lower montane coniferous forest.  | Sandy or gravelly sites. 1500-2350m.   |
| <i>Chaenactis suffrutescens</i>                     | Shasta chaenactis          | None                   | None                 | 1B.3      | BLM-Sensitive; USFS-Sensitive | Lower montane coniferous forest, upper montane coniferous forest.                               | Sandy or serpentine soils. 760-2100m.  |
| <i>Eriogonum nortonii</i>                           | Pinnacles buckwheat        | None                   | None                 | 1B.3      |                               | Chaparral, valley and foothill grassland.   | Sandy soils; often on recent burns; western Santa Lucias. 390-975m.  |
| <i>Lupinus magnificus</i> var. <i>hesperius</i>     | Mogee Meadows lupine       | None                   | None                 | 1B.3      | BLM-Sensitive                 | Great Basin scrub, upper montane coniferous forest.   | Sandy substrates. 1260-1830m.  |
| <i>Cryptantha excavata</i>                          | deep-scarred cryptantha    | None                   | None                 | 1B.3      | BLM-Sensitive                 | Cismontane woodland.  | Sandy, gravelly, dry streambanks. 100-500m.  |
| <i>Potentilla cristae</i>                           | crested potentilla         | None                   | None                 | 1B.3      |                               | Alpine boulder and rock field, subalpine coniferous forest.                                     | Seasonally wet swales and seeps; gravelly or rocky sites; often on serpentine. 1800-2800m.                             |
| <i>Lupinus gracilentus</i>                          | slender lupine             | None                   | None                 | 1B.3      | USFS-Sensitive                | Subalpine coniferous forest.  | Semi-moist shaded areas. 2500-3500m.   |
| <i>Hesperolinon tehamense</i>                       | Tehama County western flax | None                   | None                 | 1B.3      | BLM-Sensitive                 | Chaparral, cismontane woodland.   | Serpentine barrens in chaparral. 545-1155m.  |
| <i>Sidalcea hickmanii</i> ssp. <i>viridis</i>       | Marin checkerbloom         | None                   | None                 | 1B.3      | USFS-Sensitive                | Chaparral.  | Serpentine or volcanic soils; sometimes appears after burns. 0-430m.   |
| <i>Dudleya abramsii</i> ssp. <i>murina</i>          | mouse-gray dudleya         | None                   | None                 | 1B.3      | BLM-Sensitive                 | Chaparral, cismontane woodland.   | Serpentine outcrops. 90-300m.  |
| <i>Eriogon serpentinus</i>                          | serpentine daisy           | None                   | None                 | 1B.3      |                               | Chaparral.  | Serpentine shrubland; one site known. 210m.  |
| <i>Minuartia stolonifera</i>                        | Scott Mountain sandwort    | None                   | None                 | 1B.3      | BLM-Sensitive; USFS-Sensitive | Lower montane coniferous forest.  | Serpentine soils, Jeffrey pine forest. 1250-1400m.   |
| <i>Erythronium citrinum</i> var. <i>roderickii</i>  | Scott Mountains fawn lily  | None                   | None                 | 1B.3      | BLM-Sensitive; USFS-Sensitive | Lower montane coniferous forest.  | Serpentine. 815-1220m.   |
| <i>Perityle villosa</i>                             | Hanaupah rock daisy        | None                   | None                 | 1B.3      | BLM-Sensitive                 | Pinyon and juniper woodland.  | Shaded rock crevices. 2120-2410m.  |
| <i>Eriogonum eastwoodianum</i>                      | Eastwood's buckwheat       | None                   | None                 | 1B.3      |                               | Cismontane woodland.  | Shale, including diatomaceous shale. 500-1000m.  |
| <i>Constancea nevinii</i>                           | Nevin's woolly sunflower   | None                   | None                 | 1B.3      |                               | Coastal bluff scrub, coastal scrub.   | Slopes and cliffs. 5-410m.   |
| <i>Eriogonum microthecum</i> var. <i>johnstonii</i> | Johnston's buckwheat       | None                   | None                 | 1B.3      | USFS-Sensitive                | Subalpine coniferous forest, upper montane coniferous forest.                                   | Slopes and ridges on granite or limestone. 2210-2900m.   |
| <i>Linanthus orcuttii</i>                           | Orcutt's linanthus         | None                   | None                 | 1B.3      | BLM-Sensitive; USFS-Sensitive | Chaparral, lower montane coniferous forest.   | Sometimes in disturbed areas; often in gravelly clearings. 1060-2000m.   |
| <i>Eriophyllum nubigenum</i>                        | Yosemite woolly sunflower  | None                   | None                 | 1B.3      | USFS-Sensitive                | Chaparral, lower montane coniferous forest, upper montane coniferous forest.                    | South facing slopes on granitic slabs and domes; gravelly soils. 1500-2365m.   |
| <i>Triteleia ixioideis</i> ssp. <i>cookii</i>       | Cook's triteleia           | None                   | None                 | 1B.3      | USFS-Sensitive                | Cismontane woodland, closed-cone coniferous forest.   | Streambanks, wet ravines; on serpentine and in serpentine seeps. Sometimes near cypresses. ?-500m.                     |
| <i>Streptanthus batrachopus</i>                     | Tamalpais jewel-flower     | None                   | None                 | 1B.3      |                               | Closed-cone coniferous forest, chaparral.   | Talus serpentine outcrops. 410-650m.   |
| <i>Lepachnia ganderi</i>                            | Gander's pitcher sage      | None                   | None                 | 1B.3      | BLM-Sensitive                 | Closed-cone coniferous forest, chaparral, coastal scrub, valley and foothill grassland.         | Usu. found in chap. or coastal scrub; sometimes in tecate cypress w/dnd. Gabbro or metavolcanic substrate. 300-1000m.  |
| <i>Asclepias nyctaginifolia</i>                     | Mojave milkweed            | None                   | None                 | 2.1       |                               | Mojavean desert scrub, pinyon-juniper woodland.   | 1000-1700m.  |
| <i>Lathyrus japonicus</i>                           | seaside pea                | None                   | None                 | 2.1       |                               | Coastal dunes.  | 1-30m.   |
| <i>Coryphantha chlorantha</i>                       | desert pincushion          | None                   | None                 | 2.1       |                               | Mojavean desert scrub, Sonoran desert scrub, Joshua tree woodland, pinyon and juniper woodland. | Calcareous substrates; rocky and gravelly sites. 300-2400m.  |
| <i>Botrychium montanum</i>                          | western goblin             | None                   | None                 | 2.1       | USFS-Sensitive                | Lower montane coniferous forest.  | Creekbanks in old-growth forest. 1500-1830m.   |
| <i>Oryctes nevadensis</i>                           | Nevada oryctes             | None                   | None                 | 2.1       |                               | Chenopod scrub, Mojavean desert scrub.  | Dry sites in loose sandy soil in washes and desert foothills in the Owens Valley. 1100-2535m.                          |
| <i>Cordylanthus orcuttianus</i>                     | Orcutt's bird's-beak       | None                   | None                 | 2.1       |                               | Coastal scrub.  | Found in coastal scrub associations on slopes; also reported from intermittently moist swales, and in washes. 100-200m |
| <i>Adolphia californica</i>                         | California adolphia        | None                   | None                 | 2.1       |                               | Chaparral, coastal sage scrub, valley and foothill grassland.                                   | From sandy/gravelly to clay soils within grassland, coastal sage scrub, or chaparral, various exposures. 15-300m.      |
| <i>Triteleia grandiflora</i> var. <i>howellii</i>   | Howell's triteleia         | None                   | None                 | 2.1       |                               | Great Basin scrub, pinyon-juniper woodland.   | In rocky areas in sagebrush scrub, and in woodland. 700-1500m.   |
| <i>Crepis runcinata</i> ssp. <i>hallii</i>          | Hall's meadow hawkbeard    | None                   | None                 | 2.1       |                               | Mojavean desert scrub, pinyon-juniper woodland.   | Moist, alkaline valley bottoms. 375-2100m.   |
| <i>Ferocactus viridescens</i>                       | San Diego barrel cactus    | None                   | None                 | 2.1       |                               | Chaparral, Diegan coastal scrub, valley and foothill grassland.                                 | Often on exposed, level or south-sloping areas; often in coastal scrub near crest of slopes. 3-485m.                   |
| <i>Stemodia durantifolia</i>                        | purple stemodia            | None                   | None                 | 2.1       |                               | Sonoran desert scrub.   | Sandy soils; mesic sites. 180-300m.  |
| <i>Ambrosia chenopodiifolia</i>                     | San Diego bur-sage         | None                   | None                 | 2.1       |                               | Coastal scrub, mostly associated with maritime succulent scrub.                                 | Slopes of canyons in open succulent scrub usually with little herbaceous cover. 55-150m.                               |

**Table J-2b. Plant Species Considered in this EIR (Upland species)**

| Scientific Name                                  | Common name                 | Federal listing status | Calif listing status | CNPS List | Other Status   | General Habitat  | Micro-Habitat  |
|--|-----------------------------|------------------------|----------------------|-----------|----------------|--|--|
| <i>Horkelia congesta</i> ssp. <i>nemorosa</i>    | Josephine horkelia          | None                   | None                 | 2.1       |                | North Coast coniferous forest.   | Vernally moist rock, clay. Generally serpentine. 300-800 m.  |
| <i>Opuntia fragilis</i>                          | brittle prickly-pear        | None                   | None                 | 2.1       |                | Pinyon-juniper woodland.   | Volcanic soils. 820m in California.  |
| <i>Polemonium carneum</i>                        | Oregon polemonium           | None                   | None                 | 2.2       |                | Coastal prairie, coastal scrub, lower montane coniferous forest.                           | 0-1830m.   |
| <i>Mertensia longiflora</i>                      | long bluebells              | None                   | None                 | 2.2       |                | Great Basin scrub, lower montane coniferous forest.  | 1525-2200m.  |
| <i>Sphaeralcea munroana</i>                      | Munro's desert mallow       | None                   | None                 | 2.2       |                | Great Basin scrub.   | 2000m.   |
| <i>Packeria bolanderi</i> var. <i>bolanderi</i>  | seacoast ragwort            | None                   | None                 | 2.2       |                | Coastal scrub, North Coast coniferous forest.  | 30-650m.   |
| <i>Androstegium breviflorum</i>                  | small-flowered androstegium | None                   | None                 | 2.2       |                | Mojavean desert scrub, desert dunes.   | Bajadas. One site known from sand dunes. 270-1600m.  |
| <i>Astragalus platytropis</i>                    | broad-keeled milk-vetch     | None                   | None                 | 2.2       |                | Alpine boulder and rock fields, pinyon-juniper woodland, subalpine coniferous forest.      | Bare ridges above timber line in pumice gravel, granite, dolomite, or limestone. 2330-3550m.                             |
| <i>Thelypodium milleflorum</i>                   | many-flowered thelypodium   | None                   | None                 | 2.2       |                | Great Basin scrub, chenopod scrub.   | Big sagebrush & rabbitbrush/bitterbrush scrubs in sandy soils; often w/other sand-related herbs. 1200-2500m.             |
| <i>Astragalus serenoii</i> var. <i>shockleyi</i> | Shockley's milk-vetch       | None                   | None                 | 2.2       |                | Chenopod scrub, pinyon and juniper woodland, Great Basin scrub.                            | Coarse, granitic alluvium. 1500-2250m.   |
| <i>Botrychium minganense</i>                     | mingan moonwort             | None                   | None                 | 2.2       | USFS-Sensitive | Lower montane coniferous forest.   | Creekbanks in mixed conifer forest. 1500-2275m.  |
| <i>Senna covesii</i>                             | Coves' cassia               | None                   | None                 | 2.2       |                | Sonoran desert scrub.  | Dry, sandy desert washes, slopes. 200-1070m.   |
| <i>Viola aurea</i>                               | golden violet               | None                   | None                 | 2.2       |                | Great Basin scrub, pinyon-juniper woodland.  | Dry, sandy slopes. 835-1800m.  |
| <i>Senecio aphanactis</i>                        | chaparral ragwort           | None                   | None                 | 2.2       |                | Cismontane woodland, coastal scrub.  | Drying alkaline flats. 20-575m.  |
| <i>Teucrium cubense</i> ssp. <i>depressum</i>    | dwarf germander             | None                   | None                 | 2.2       |                | Desert dunes, playas, Sonoran desert scrub.  | Dunes, playa margins and scrub. 45-400m.   |
| <i>Stenotus lanuginosus</i>                      | woolly stenotus             | None                   | None                 | 2.2       | BLM-Sensitive  | Pinyon-juniper woodland, Great Basin scrub.  | Exposed ridges and flats in shallow, rocky soil. Often in sagebrush at edges of other vegetation types. 1500-1850m.      |
| <i>Aliciella tridodon</i>                        | coyote gilia                | None                   | None                 | 2.2       |                | Great Basin scrub, pinyon and juniper woodland.  | Fine clayey sand or sand. 610-1700m.   |
| <i>Sclerocactus johnsonii</i>                    | Johnson's bee-hive cactus   | None                   | None                 | 2.2       |                | Mojavean desert scrub.   | Granitic soils. 500-1200m.   |
| <i>Lupinus uncialis</i>                          | lilliput lupine             | None                   | None                 | 2.2       | BLM-Sensitive  | Great Basin scrub, pinyon-juniper woodland.  | Hilltops, bluffs, barrens, & talus in sagebrush scrub and p-j wldnd. on limestone, rhyolite, volc ash, etc. 1300-14005m. |
| <i>Ditaxis claryana</i>                          | glandular ditaxis           | None                   | None                 | 2.2       |                | Mojavean desert scrub, Sonoran desert scrub.   | In dry washes and on rocky hillsides. Sandy soils. 0-465m.   |
| <i>Nemacaulis denudata</i> var. <i>gracilis</i>  | slender cottonheads         | None                   | None                 | 2.2       |                | Coastal dunes, desert dunes, Sonoran desert scrub.   | In dunes or sand. 0-560m.  |
| <i>Lewisia oppositifolia</i>                     | opposite-leaved lewisia     | None                   | None                 | 2.2       | USFS-Sensitive | Lower montane coniferous forest.   | In open, rocky, shallow soils; sometimes on serpentine. Mesic sites. 300-1220m.  |
| <i>Hulsea vestita</i> ssp. <i>inyoensis</i>      | Inyo hulsea                 | None                   | None                 | 2.2       |                | Pinyon-juniper woodland, Great Basin scrub.  | In volcanic ash on steep slopes. 1635-3000m.   |
| <i>Castilleja miniata</i> ssp. <i>elata</i>      | Siskiyou paintbrush         | None                   | None                 | 2.2       |                | Lower montane coniferous forest, bogs and fens.  | Limited to mesic serpentine soils; often associated with bogs, seeps, stream benches, and dry gullies. 0-1750m.          |
| <i>Bergerocactus emoryi</i>                      | golden-spined cereus        | None                   | None                 | 2.2       |                | Coastal scrub, sometimes chaparral margins.  | Limited to the coastal belt. Usually on clay soils. 3-395m.  |
| <i>Didymodon norrisii</i>                        | Norris' beard moss          | None                   | None                 | 2.2       |                | Cismontane woodland, lower montane coniferous forest.                                      | Moss from intermittently mesic sites; on rocks. 600-1700m.   |
| <i>Mielichhoferia elongata</i>                   | elongate copper moss        | None                   | None                 | 2.2       | USFS-Sensitive | Cismontane woodland. Commonly called "copper mosses".                                      | Moss growing on metamorphic rock; usually vernal mesic. 500-1300m.   |
| <i>Fissidens aphelotaxifolius</i>                | brook pocket moss           | None                   | None                 | 2.2       | USFS-Sensitive | Lower montane coniferous forest, upper montane coniferous forest.                          | Moss growing on rocks in stream channels and waterfalls; also in splash zones. 2000-2200m.                               |
| <i>Trichodon cylindricus</i>                     | cylindrical trichodon       | None                   | None                 | 2.2       |                | Broadleaved upland forest, upper montane coniferous forest.                                | Moss growing on sandy, exposed soil, roadbanks. 50-1500m.  |
| <i>Scopelophila cataractae</i>                   | tongue-leaf copper moss     | None                   | None                 | 2.2       |                | Cismontane woodland.   | Moss on metamorphic substrate; on soil. 400m.  |
| <i>Discelium nudum</i>                           | naked flag moss             | None                   | None                 | 2.2       |                | Coastal bluff scrub.   | Moss that grows on soil on clay banks. 10-50m.   |
| <i>Anomobryum julaceum</i>                       | slender silver moss         | None                   | None                 | 2.2       |                | Broadleaved upland forest, lower montane coniferous forest, north coast coniferous forest. | Moss which grows on damp rocks and soil; usually seen on roadcuts. 100-1000m.  |
| <i>Coreopsis maritima</i>                        | sea dahlia                  | None                   | None                 | 2.2       |                | Coastal scrub, coastal bluff scrub.  | Occurs on a variety of soil types, including sandstone. 5-150m.  |
| <i>Lathyrus rigidus</i>                          | rigid pea                   | None                   | None                 | 2.2       |                | Great Basin scrub, pinyon-juniper woodland.  | Often in disturbed areas. 800-1525m.   |
| <i>Monotropa uniflora</i>                        | ghost-pipe                  | None                   | None                 | 2.2       |                | Broadleaved upland forest, North Coast coniferous forest.                                  | Often under redwoods or western hemlock. 10-200m.  |
| <i>Enneapogon desvauxii</i>                      | nine-awned pappus grass     | None                   | None                 | 2.2       |                | Pinyon and juniper woodland.   | On decomposed granite, or in gravelly limestone soils. 1240-1825m.   |
| <i>Eriogonum pendulum</i>                        | Waldo wild buckwheat        | None                   | None                 | 2.2       | USFS-Sensitive | Lower montane coniferous forest, upper montane coniferous forest.                          | On dry, rocky ultramafic soils; open somewhat grassy areas w/in pine forest. 225-1000m.                                  |
| <i>Coryphantha vivipara</i> var. <i>rosea</i>    | viviparous foxtail cactus   | None                   | None                 | 2.2       |                | Mojavean desert scrub, pinyon and juniper woodland.  | On gravelly limestone or volcanic slopes and brushy hillsides. 1250-2700m.   |
| <i>Cordylanthus capitatus</i>                    | Yakima bird's-beak          | None                   | None                 | 2.2       |                | Lower montane coniferous forest, pinyon-juniper woodland.                                  | On open dry slopes and woodlands. 1800-2095m.  |
| <i>Arabis shockleyi</i>                          | Shockley's rock-cress       | None                   | None                 | 2.2       | USFS-Sensitive | Pinyon and juniper woodland.   | On ridges, rocky outcrops and openings on limestone or quartzite; usually in pinyon or p-j series. 875-2205m.            |
| <i>Fraxinus parryi</i>                           | chaparral ash               | None                   | None                 | 2.2       |                | Chaparral.   | Open mixed chaparral and in the chaparral-sage scrub interface in California. 213-620m.                                  |
| <i>Eriogonum nudum</i> var. <i>paralinum</i>     | Del Norte buckwheat         | None                   | None                 | 2.2       |                | Coastal bluff scrub, coastal prairie.  | Open places along immediate coast. 5-80m.  |

Table J-2b. Plant Species Considered in this EIR (Upland species)

| Scientific Name  | Common name                   | Federal listing status | Calif listing status | CNPS List | Other Status  | General Habitat  | Micro-Habitat  |
|--|-------------------------------|------------------------|----------------------|-----------|---------------|--|--|
| <i>Astragalus insularis</i> var. <i>harwoodii</i>      | Harwood's milk-vetch          | None                   | None                 | 2.2       |               | Desert dunes.  | Open sandy flats and sandy or stony desert washes; mostly in creosote bush scrub. -50-500m.                        |
| <i>Triteleia hendersonii</i> var. <i>hendersonii</i>   | Henderson's triteleia         | None                   | None                 | 2.2       |               | Cismontane woodland.   | Open slopes and roadbanks. 760-1200m.  |
| <i>Arnica fulgens</i>                                  | hillside arnica               | None                   | None                 | 2.2       |               | Great Basin scrub, lower montane coniferous forest, meadows.   | Open, damp depressions and meadows in sagebrush scrub or juniper woodland. 1470-2700m.                             |
| <i>Munroa squarrosa</i>                                | false buffalo-grass           | None                   | None                 | 2.2       |               | Pinyon-juniper woodland.   | Open, gravelly or rocky places. 1500-2400m.  |
| <i>Microseris laciniata</i> ssp. <i>detlingii</i>      | Detling's silverpuffs         | None                   | None                 | 2.2       |               | Cismontane woodland.   | Openings in clay soils. 600-1500m.   |
| <i>Erythronium oregonum</i>                            | giant fawn lily               | None                   | None                 | 2.2       |               | Cismontane woodland, meadows and seeps.  | Openings. Sometimes on serpentine; rocky sites. 100-500m.  |
| <i>Sanvitalia abertii</i>                              | Abert's sanvitalia            | None                   | None                 | 2.2       |               | Pinyon-juniper woodland.   | Rocky limestone slopes and washes. 1570-1800m.   |
| <i>Euphorbia misera</i>                                | cliff spurge                  | None                   | None                 | 2.2       |               | Coastal bluff scrub, coastal scrub.  | Rocky sites. 10-500m.  |
| <i>Carnegiea gigantea</i>                              | saguaro                       | None                   | None                 | 2.2       |               | Sonoran desert scrub.  | Rocky sites. 50-1500m.   |
| <i>Arctomecon merriamii</i>                            | white bear poppy              | None                   | None                 | 2.2       |               | Chenopod scrub, Mojavean desert scrub.   | Rocky slopes, calcareous soil, loose shale, or sandy washes. 490-1585m.  |
| <i>Muhlenbergia appressa</i>                           | appressed muhly               | None                   | None                 | 2.2       |               | Coastal sage scrub, Mojavean desert scrub, valley and foothill grassland. Possibly undercollected in California. | Rocky slopes, canyon bottoms. 20-1600m.  |
| <i>Lomatium peckianum</i>                              | Peck's lomatium               | None                   | None                 | 2.2       |               | Cismontane woodland, lower montane coniferous forest, pinyon and juniper woodland.                               | Rocky slopes, flats, & sometimes grassy openings, in yellow pine-black oak woodland, on volcanic soils. 700-1800m. |
| <i>Shepherdia canadensis</i>                           | Canadian buffalo-berry        | None                   | None                 | 2.2       |               | Upper montane coniferous forest.   | Rocky streambanks, on serpentine. 1731m in California.   |
| <i>Vaccinium scoparium</i>                             | little-leaved huckleberry     | None                   | None                 | 2.2       |               | Subalpine coniferous forest.   | Rocky, subalpine woods; one site near Gasquet in "Boggy Creek." (135)1800-2365m.                                   |
| <i>Salvia munzii</i>                                   | Munz's sage                   | None                   | None                 | 2.2       |               | Coastal scrub, chaparral.  | Rolling hills and slopes, in rocky soil. 120-1090m.  |
| <i>Opuntia pulchella</i>                               | beautiful cholla              | None                   | None                 | 2.2       |               | Desert dunes, Mojavean desert scrub, Great Basin scrub?  | Sand of dunes, dry lake borders, river bottoms, washes, valleys and sagebrush desert. 1500-1980m.                  |
| <i>Loeflingia squarrosa</i> var. <i>artemisiarum</i>   | sagebrush loeflingia          | None                   | None                 | 2.2       | BLM-Sensitive | Great Basin scrub, Sonoran desert scrub, desert dunes.   | Sandy flats and dunes. Sandy areas around clay slicks w/Sarcobatus, Atriplex, Tetradymia, etc. 700-1200m.          |
| <i>Astragalus geyeri</i> var. <i>geyeri</i>            | Geyer's milk-vetch            | None                   | None                 | 2.2       |               | Chenopod scrub, Great Basin scrub.   | Sandy flats and valley floors, depressions in mobile or stabilized dunes, and along draws. 1150-1550m.             |
| <i>Astragalus allochrous</i> var. <i>playanus</i>      | playa milk-vetch              | None                   | None                 | 2.2       |               | Mojavean desert scrub.   | Sandy flats, in creosote bush scrub. 780-805m.   |
| <i>Cymopterus multinervatus</i>                        | purple-nerve cymopterus       | None                   | None                 | 2.2       |               | Mojavean desert scrub, pinyon and juniper woodland, Joshua tree woodland.  | Sandy or gravelly places. 790-1800m.   |
| <i>Camissonia arenaria</i>                             | sand evening-primrose         | None                   | None                 | 2.2       |               | Sonoran desert scrub.  | Sandy or rocky sites. -70-915m.  |
| <i>Mentzelia torreyi</i>                               | Torrey's blazing star         | None                   | None                 | 2.2       |               | Great Basin scrub, Mojavean desert scrub, pinyon-juniper woodland.   | Sandy or rocky sites; alkaline, usually volcanic soils. 1170-2835m.  |
| <i>Castilleja affinis</i> ssp. <i>litoralis</i>        | Oregon coast paintbrush       | None                   | None                 | 2.2       |               | Coastal bluff scrub, coastal dunes, coastal scrub.   | Sandy sites. 15-100m.  |
| <i>Grusonia parishii</i>                               | Parish's club-cholla          | None                   | None                 | 2.2       |               | Mojavean desert scrub, Sonoran desert scrub, Joshua tree woodland.   | Sandy sites. 300-1524m.  |
| <i>Chamaesyce abramsiana</i>                           | Abrams' spurge                | None                   | None                 | 2.2       |               | Mojavean desert scrub, Sonoran desert scrub.   | Sandy sites. -5-915m.  |
| <i>Chaetadelpa wheeleri</i>                            | Wheeler's dune-broom          | None                   | None                 | 2.2       |               | Desert dunes, Great Basin scrub, Mojavean desert scrub.  | Sandy sites. 850-1900m.  |
| <i>Ambrosia monogyra</i>                               | singlewhorl burrobush         | None                   | None                 | 2.2       |               | Chaparral, Sonoran desert scrub.   | Sandy soils. 10-500m.  |
| <i>Tetradymia tetrameres</i>                           | dune horsebrush               | None                   | None                 | 2.2       |               | Great Basin scrub.   | Sandy soils. 1200-2135m.   |
| <i>Cymopterus globosus</i>                             | globose cymopterus            | None                   | None                 | 2.2       |               | Great Basin scrub.   | Sandy, open flats. 1200-2135m.   |
| <i>Arabis aculeolata</i>                               | Waldo rock-cress              | None                   | None                 | 2.2       |               | Broadleaved upland forest, lower montane coniferous forest, upper montane coniferous forest.                     | Serpentine slopes and ridges. 410-1800m.   |
| <i>Selaginella eremophila</i>                          | desert spike-moss             | None                   | None                 | 2.2       |               | Sonoran desert scrub.  | Shaded sites, gravelly soils; crevices or among rocks. 300-2425m.  |
| <i>Eriogonum ochrocephalum</i> var. <i>alexanderae</i> | Alexander's buckwheat         | None                   | None                 | 2.2       |               | Great Basin scrub, pinyon and juniper woodland.  | Shale or gravel. 1300-2880m.   |
| <i>Opuntia curvispina</i>                              | curved-spine beavertail       | None                   | None                 | 2.2       |               | Chaparral, Mojavean desert scrub, pinyon-juniper woodland.   | Stabilized hybrid between <i>O. phaeantha</i> x <i>O. chlorotica</i> . 1000-1400m.                                 |
| <i>Hymenoxys lemmonii</i>                              | alkali hymenoxys              | None                   | None                 | 2.2       |               | Great Basin scrub, lower montane coniferous forest, meadows and seeps.   | Subalkaline soils. 240-1000m.  |
| <i>Viola palustris</i>                                 | alpine marsh violet           | None                   | None                 | 2.2       |               | Coastal scrub, bogs and fens.  | Swampy, shrubby places in coastal scrub or coastal bogs. 0-15m.  |
| <i>Campylopodella stenocarpa</i>                       | flagella-like atractylocarpus | None                   | None                 | 2.2       |               | Cismontane woodland.   | Unknown. 100-500m.   |
| <i>Mertensia oblongifolia</i> var. <i>oblongifolia</i> | sagebrush bluebells           | None                   | None                 | 2.2       |               | Great Basin scrub, lower montane coniferous forest, meadows and seeps, subalpine coniferous forest.              | Usually in mesic sites. 1000-3000m.  |
| <i>Atriplex gardneri</i> var. <i>falcata</i>           | falcate saltbush              | None                   | None                 | 2.2       |               | Chenopod scrub, Great Basin scrub.   | Usually on subalkaline soils in low chenopod scrub. 1200-1700m.  |
| <i>Polygala subspinoso</i>                             | spiny milkwort                | None                   | None                 | 2.2       |               | Great Basin scrub, pinyon-juniper woodland.  | Volcanic mesas, gravelly soils; often in sagebrush scrub. 1270-1705m.  |
| <i>Lomatium foeniculaceum</i> var. <i>macedougali</i>  | Macdougall's lomatium         | None                   | None                 | 2.2       |               | Chenopod scrub, Great Basin scrub, lower montane coniferous forest, pinyon-juniper woodland.                     | Volcanic soil. 1200-1900m.   |
| <i>Collomia tenella</i>                                | slender collomia              | None                   | None                 | 2.2       |               | Upper montane coniferous forest.   | Volcanic soils. 2170m.   |
| <i>Penstemon janishiae</i>                             | Janish's beardtongue          | None                   | None                 | 2.2       | BLM-Sensitive | Great Basin scrub, lower montane coniferous forest, pinyon-juniper woodland.                                     | Volcanic soils; gravelly sites. 1065-2350m.  |
| <i>Astragalus tidestromii</i>                          | Tidestrom's milk-vetch        | None                   | None                 | 2.2       |               | Mojavean desert scrub.   | Washes; limestone. 600-1585m.  |
| <i>Trichophorum pumilum</i>                            | little bulrush                | None                   | None                 | 2.2       |               | Alpine dwarf scrub?  | Wet sites, limestone soils. 2875-3250m.  |
| <i>Carex scoparia</i>                                  | pointed broom sedge           | None                   | None                 | 2.2       |               | Great Basin scrub.   | Wet, open places. 130-1000m.   |
| <i>Monarda pectinata</i>                               | plains bee balm               | None                   | None                 | 2.3       |               | Joshua tree woodland, pinyon-juniper woodland.   |  |
| <i>Mirabilis coccinea</i>                              | red four o'clock              | None                   | None                 | 2.3       |               | Pinyon-juniper woodland.   | 1070-1800m.  |
| <i>Eurybia merita</i>                                  | subalpine aster               | None                   | None                 | 2.3       |               | Upper montane coniferous forest.   | 1300-2000m.  |

Table J-2b. Plant Species Considered in this EIR (Upland species)

| Scientific Name                                       | Common name                | Federal listing status | Calif listing status | CNPS List | Other Status   | General Habitat   | Micro-Habitat   |
|---|----------------------------|------------------------|----------------------|-----------|----------------|---|---|
| <i>Phacelia coerulea</i>                              | sky-blue phacelia          | None                   | None                 | 2.3       |                | Mojavean desert scrub, pinyon-juniper woodland.   | 1400-2000m.   |
| <i>Erigeron nevadincola</i>                           | Nevada daisy               | None                   | None                 | 2.3       |                | Great Basin scrub, lower montane coniferous forest, pinyon-juniper woodland.                              | 1400-2900m.   |
| <i>Eriodictyon angustifolium</i>                      | narrow-leaved yerba santa  | None                   | None                 | 2.3       |                | Pinyon-juniper woodland.  | 1500-1900m.   |
| <i>Silene oregana</i>                                 | Oregon campion             | None                   | None                 | 2.3       |                | Great Basin scrub, subalpine coniferous forest.   | 1500-2500m.   |
| <i>Orobanche ludoviciana</i> var. <i>arenosa</i>      | Suksdorf's broom-rape      | None                   | None                 | 2.3       |                | Great Basin scrub.  | 1600m.  |
| <i>Cryptantha celosioides</i>                         | cocks-comb cat's-eye       | None                   | None                 | 2.3       |                | Pinyon and juniper woodland.  | 1615m.  |
| <i>Osmorhiza depauperata</i>                          | blunt-fruited sweet-cicely | None                   | None                 | 2.3       |                | Lower montane coniferous forest.  | 1830-1850m.   |
| <i>Cryptantha fendleri</i>                            | sand dune cryptantha       | None                   | None                 | 2.3       |                | Great Basin scrub.  | 1950-2210m.   |
| <i>Mielichhoferia mielichhoferiana</i>                | Mielichhofer's copper moss | None                   | None                 | 2.3       |                | Subalpine coniferous forest.  | 1975m.  |
| <i>Synthyris missurica</i> ssp. <i>missurica</i>      | kitten-tails               | None                   | None                 | 2.3       |                | Lower montane coniferous forest, subalpine coniferous forest, upper montane coniferous forest.            | 2000-2500m.   |
| <i>Halimolobos virgata</i>                            | virgate halimolobos        | None                   | None                 | 2.3       |                | Meadows, pinyon and juniper woodland.   | 2000-3000m.   |
| <i>Polygala intermontana</i>                          | intermountain milkwort     | None                   | None                 | 2.3       |                | Pinyon-juniper woodland.  | 2010-3080m.   |
| <i>Oryzopsis exigua</i>                               | little ricegrass           | None                   | None                 | 2.3       | BLM-Sensitive  | Great Basin scrub.  | 2345-2420m.   |
| <i>Botrychium lunaria</i>                             | common moonwort            | None                   | None                 | 2.3       | USFS-Sensitive | Meadows, subalpine coniferous forest, upper montane coniferous forest.                                    | 2760-3400m.   |
| <i>Lycium parishii</i>                                | Parish's desert-thorn      | None                   | None                 | 2.3       |                | Coastal scrub, Sonoran desert scrub.  | 300-1000m.  |
| <i>Erythronium hendersonii</i>                        | Henderson's fawn lily      | None                   | None                 | 2.3       |                | Lower montane coniferous forest.  | 300-1600m.  |
| <i>Festuca minutiflora</i>                            | small-flowered fescue      | None                   | None                 | 2.3       |                | Alpine boulder and rock field.  | 3200-4050m.   |
| <i>Camissonia claviformis</i> ssp. <i>cruciformis</i> | cruciform evening-primrose | None                   | None                 | 2.3       |                | Chenopod scrub, Great Basin scrub.  | 600-1400m.  |
| <i>Mimulus cusickii</i>                               | Cusick's monkeyflower      | None                   | None                 | 2.3       |                | Great Basin scrub, lower montane coniferous forest.   | 600-1830m.  |
| <i>Cordylanthus parviflorus</i>                       | small-flowered bird's-beak | None                   | None                 | 2.3       |                | Joshua tree woodland, pinyon-juniper woodland, Mojavean desert scrub.                                     | 700-2200m.  |
| <i>Polygala acanthoclada</i>                          | thorny milkwort            | None                   | None                 | 2.3       |                | Chenopod scrub, Joshua tree woodland, pinyon-juniper woodland.  | 760-2285m.  |
| <i>Camissonia boothii</i> ssp. <i>boothii</i>         | Booth's evening-primrose   | None                   | None                 | 2.3       |                | Joshua tree woodland, pinyon-juniper woodland.  | 900-2400m.  |
| <i>Micromonolepis pusilla</i>                         | dwarf monolepis            | None                   | None                 | 2.3       |                | Great Basin scrub.  | Alkaline sites, openings. 1500-2400m.   |
| <i>Pedicularis centranthera</i>                       | Great Basin lousewort      | None                   | None                 | 2.3       | BLM-Sensitive  | Great Basin scrub.  | Alluvial fans; dry, ashy loam w/ <i>Artemisia tridentata</i> , <i>Juniperus</i> , <i>Chrysothamnus</i> , etc. 1300-1500m. |
| <i>Tonestus lyallii</i>                               | Lyall's tonestus           | None                   | None                 | 2.3       |                | Alpine boulder and rock field.  | Alpine talus, barrens. 2500-2700m.  |
| <i>Phacelia sericea</i> var. <i>ciliosa</i>           | blue alpine phacelia       | None                   | None                 | 2.3       |                | Upper montane coniferous forest, subalpine coniferous forest.   | Among rocks on ridgetops, peaks, and at the base of cliffs. 2100-2700m.   |
| <i>Lomatium martindalei</i>                           | Coast Range lomatium       | None                   | None                 | 2.3       |                | Lower montane coniferous forest, coastal bluff scrub, meadows.  | Bogs and seeps along creeks and on ridgetops, often on serpentine. 240-3000m.   |
| <i>Cymopterus gilmanii</i>                            | Gilman's cymopterus        | None                   | None                 | 2.3       |                | Mojavean desert scrub.  | Carbonate; dry rocky slopes in creosote bush scrub; from the Last Chance Range to Death Valley. 1000-2000m.               |
| <i>Hackelia sharsmithii</i>                           | Sharsmith's stickseed      | None                   | None                 | 2.3       |                | Subalpine coniferous forest, alpine boulder and rock fields.  | Cracks, crevices in granite cliffs; large boulder talus. 3000-3700m.  |
| <i>Ivesia baileyi</i> var. <i>baileyi</i>             | Bailey's ivesia            | None                   | None                 | 2.3       |                | Lower montane coniferous forest.  | Crevices in volcanic rock cliffs and on rock outcrops. 1575-2600m.  |
| <i>Physalis lobata</i>                                | lobed ground-cherry        | None                   | None                 | 2.3       |                | Mojavean desert scrub, playas.  | Decomposed granite soil, alkaline dry lakes. 500-800m.  |
| <i>Rubus nivalis</i>                                  | snow dwarf bramble         | None                   | None                 | 2.3       |                | North Coast coniferous forest.  | Deep soil, with Douglas-fir overstory. 1075-1250m.  |
| <i>Astragalus umbraticus</i>                          | Bald Mountain milk-vetch   | None                   | None                 | 2.3       |                | Cismontane woodland.  | Dry open oak and pine woodlands. 200-1250m.   |
| <i>Linum puberulum</i>                                | plains flax                | None                   | None                 | 2.3       |                | Pinyon and juniper woodland, Great Basin scrub, Joshua tree woodland, Mojavean desert scrub.              | Dry ridges. 1000-2500m.   |
| <i>Matelea parvifolia</i>                             | spear-leaf matelea         | None                   | None                 | 2.3       | USFS-Sensitive | Mojavean desert scrub, Sonoran desert scrub.  | Dry rocky ledges and slopes. 440-1095m.   |
| <i>Ipomopsis tenuifolia</i>                           | slender-leaved ipomopsis   | None                   | None                 | 2.3       |                | Chaparral, pinyon and juniper woodland, Sonoran desert scrub.   | Dry rocky or gravelly slopes. 100-1200m.  |
| <i>Linanthus bellus</i>                               | desert beauty              | None                   | None                 | 2.3       |                | Chaparral.  | Dry slopes and flats; open sandy spots in chaparral, mostly in loamy coarse sandy dg soil types. 920-1400m.               |
| <i>Antennaria marginata</i>                           | white-margined everlasting | None                   | None                 | 2.3       |                | Lower montane coniferous forest, upper montane coniferous forest.   | Dry woods. 2120-3330m.  |
| <i>Salix brachycarpa</i> ssp. <i>brachycarpa</i>      | short-fruited willow       | None                   | None                 | 2.3       |                | Alpine dwarf scrub, meadows and seeps, subalpine coniferous forest.                                       | Edges of lakes, and in wet meadows, on limestone, marble, and metamorphic substrates. 3150-3500m.                         |
| <i>Asplenium septentrionale</i>                       | northern spleenwort        | None                   | None                 | 2.3       |                | Chaparral, lower montane coniferous forest, subalpine coniferous forest, upper montane coniferous forest. | Forms grass-like tufts in granitic rock crevices. 1615-3350m.   |
| <i>Acleisanthes longiflora</i>                        | angel trumpets             | None                   | None                 | 2.3       |                | Sonoran desert scrub.   | Generally on limestone. 10-2500m.   |
| <i>Potentilla rimicola</i>                            | cliff cinquefoil           | None                   | None                 | 2.3       | USFS-Sensitive | Subalpine coniferous forest, upper montane coniferous forest.   | Granite crevices; rocky sites. 2390-3030m.  |
| <i>Pellaea truncata</i>                               | spiny cliff-brake          | None                   | None                 | 2.3       |                | Pinyon-juniper woodland.  | Granitic boulders and fissures in granite cliffs, also in volcanic or sandy limestone soils. 1200-2150m.                  |
| <i>Psoralea fremontii</i> var. <i>attenuatus</i>      | narrow-leaved psoralea     | None                   | None                 | 2.3       |                | Sonoran desert scrub.   | Granitic or volcanic soils. 365-900m.   |

Table J-2b. Plant Species Considered in this EIR (Upland species)

| Scientific Name                                      | Common name               | Federal listing status | Calif listing status | CNPS List | Other Status   | General Habitat  | Micro-Habitat   |
|--|---------------------------|------------------------|----------------------|-----------|----------------|--|---|
| <i>Arabis dispar</i>                                 | pinyon rock-cress         | None                   | None                 | 2.3       |                | Joshua tree woodland, pinyon-juniper woodland, Mojavean desert scrub.          | Granitic, gravelly slopes & mesas. Often under desert shrubs which support it as it grows. 1200-2400m.                                  |
| <i>Sclerogonum brevifolium</i>                       | burro grass               | None                   | None                 | 2.3       |                | Mojavean desert scrub.   | Grassy areas, decomposed granite. 1575-1600m.   |
| <i>Botrychium ascendens</i>                          | upswept moonwort          | None                   | None                 | 2.3       | USFS-Sensitive | Lower montane coniferous forest.   | Grassy fields, coniferous woods near springs and creeks. 1500-2060m.  |
| <i>Oxytropis oreophila</i> var. <i>oreophila</i>     | rock-loving oxytrope      | None                   | None                 | 2.3       |                | Alpine boulder and rock field, subalpine coniferous forest.                    | Gravelly or rocky sites. 3400-3800m.  |
| <i>Boechera pendulina</i>                            | rabbit-ear rock-cress     | None                   | None                 | 2.3       |                | Great Basin scrub.   | Gravelly or rocky substrates. 3050m.  |
| <i>Townsendia condensata</i>                         | cushion townsendia        | None                   | None                 | 2.3       |                | Alpine boulder and rock field, subalpine coniferous forest.                    | Gravelly sites. 2865-3675m.   |
| <i>Castela emoryi</i>                                | Emory's crucifixion-thorn | None                   | None                 | 2.3       |                | Mojavean desert scrub, Sonoran desert scrub, playas.                           | Gravelly soils, sometimes in alkali playas or washes. 85-770m.  |
| <i>Draba breweri</i> var. <i>cana</i>                | canescent draba           | None                   | None                 | 2.3       |                | Alpine boulder and rock field, meadows, subalpine coniferous forest.           | In Calif., known only from two occurrences near Lake Geneva and Wheeler Pk. 3000-3505m.   |
| <i>Salix nivalis</i>                                 | snow willow               | None                   | None                 | 2.3       |                | Alpine dwarf scrub.  | In California, on lakeshore with <i>Potentilla</i> , <i>Salix</i> spp., <i>Penstemon</i> , etc. 3100-3500m.                             |
| <i>Dryopteris filix-mas</i>                          | male fern                 | None                   | None                 | 2.3       |                | Upper montane coniferous forest.   | In granite crevices. 2400-3100m.  |
| <i>Erigeron bloomeri</i> var. <i>nudatus</i>         | Waldo daisy               | None                   | None                 | 2.3       |                | Lower montane coniferous forest, upper montane coniferous forest.              | In open areas on dry rocky outcrops on serpentine. 600-2300m.   |
| <i>Allium atrorubens</i> var. <i>atrorubens</i>      | Great Basin onion         | None                   | None                 | 2.3       |                | Great Basin scrub, pinyon-juniper woodland.                                    | In sandy, rocky, gravelly, or sometimes clay soils in the White Mountains. 1200-2100m.  |
| <i>Claytonia megarhiza</i>                           | fell-fields claytonia     | None                   | None                 | 2.3       |                | Alpine fell fields, subalpine coniferous forest.                               | In the crevices between rocks, rocky or gravelly soil. 2600-3300m.  |
| <i>Delphinium stachydeum</i>                         | spiked larkspur           | None                   | None                 | 2.3       |                | Upper montane coniferous forest, Great Basin scrub.                            | Known in CA only from the Warner Mtns, on a dry, rocky ridge. 1950-2600m.   |
| <i>Bouteloua trifida</i>                             | three-awned grama         | None                   | None                 | 2.3       |                | Mojavean desert scrub.   | Limestone ravines and rocky hills, sometimes in narrow crevices. Assoc incl <i>Agave utahensis</i> , <i>Salvia funerea</i> . 700-2000m. |
| <i>Physaria chambersii</i>                           | Chambers' physaria        | None                   | None                 | 2.3       |                | Pinyon-juniper woodland.   | Limestone soils; rocky sites. 1500-2590m.   |
| <i>Erigeron utahensis</i>                            | Utah daisy                | None                   | None                 | 2.3       |                | Pinyon-juniper woodland.   | Limestone. 1500-2320m.  |
| <i>Geraea viscida</i>                                | sticky geraea             | None                   | None                 | 2.3       |                | Chaparral.   | Loamy coarse sand to gravelly sand soils; often in post burned areas and in bulldozed areas. 450-1700m.                                 |
| <i>Stachys palustris</i> ssp. <i>pilosa</i>          | hairy marsh hedge-nettle  | None                   | None                 | 2.3       |                | Great Basin scrub.   | Mesic sites. 1200-1525m.  |
| <i>Valeriana occidentalis</i>                        | western valerian          | None                   | None                 | 2.3       |                | Lower montane coniferous forest.   | Mesic sites. 1500-1800m.  |
| <i>Arenaria lanuginosa</i> ssp. <i>saxosa</i>        | rock sandwort             | None                   | None                 | 2.3       | USFS-Sensitive | Subalpine coniferous forest, upper montane coniferous forest.                  | Mesic, sandy sites. 1800-2600m.   |
| <i>Kobresia bellardii</i>                            | sheep kobresia            | None                   | None                 | 2.3       |                | Alpine boulder and rock field (mesic), meadows, subalpine coniferous forest.   | Moist places in alpine and subalpine meadows; can be on limestone substrate. 2955-3230m.  |
| <i>Saxifraga rufidula</i>                            | red-wool saxifrage        | None                   | None                 | 2.3       |                | Upper montane coniferous forest.   | Moist, rocky areas. 1850-2000m.   |
| <i>Myurella julacea</i>                              | small mousetail moss      | None                   | None                 | 2.3       |                | Alpine boulder and rock field, subalpine coniferous forest.                    | Moss growing on damp rock and soil. 2700-3000m.   |
| <i>Pohlia tundrae</i>                                | tundra thread moss        | None                   | None                 | 2.3       |                | Alpine boulder and rock field.   | Moss growing on gravelly, damp soil. 2700-3000m.  |
| <i>Sphagnum strictum</i>                             | pale peat moss            | None                   | None                 | 2.3       |                | Subalpine coniferous forest.   | Moss growing on soil at lake margins. 2600-2800m.   |
| <i>Tortella alpicola</i>                             | alpine crisp moss         | None                   | None                 | 2.3       |                | Cismontane woodland.   | Moss on volcanic rock. 1400m in California.   |
| <i>Carex halliana</i>                                | Oregon sedge              | None                   | None                 | 2.3       |                | Pinyon-juniper woodland, meadows.  | Often on pumice. 1370-2060m.  |
| <i>Draba lonchocarpa</i> var. <i>lonchocarpa</i>     | spear-fruited draba       | None                   | None                 | 2.3       |                | Alpine boulder and rock fields.  | On limestone scree. 3000-3295m.   |
| <i>Arabis pulchra</i> var. <i>munciensis</i>         | Darwin rock-cress         | None                   | None                 | 2.3       | BLM-Sensitive  | Chenopod scrub, Mojavean desert scrub.   | On limestone. 1100-2075m.   |
| <i>Aliciella ripleyi</i>                             | Ripley's aliciella        | None                   | None                 | 2.3       |                | Mojavean desert scrub.   | On limestone; rocky slopes, rock/cliff bases, and rock crevices. 305-1770m.   |
| <i>Colubrina californica</i>                         | Las Animas colubrina      | None                   | None                 | 2.3       |                | Mojavean desert scrub.   | On narrow, steep, rocky ravines or washes. 10-1000m.  |
| <i>Asplenium trichomanes</i> ssp. <i>trichomanes</i> | maidenhair spleenwort     | None                   | None                 | 2.3       |                | Lower montane coniferous forest.   | On rocks. 185-200m.   |
| <i>Elymus scribneri</i>                              | Scribner's wheat grass    | None                   | None                 | 2.3       |                | Alpine boulder and rock field.   | On rocky slopes. 2900-4200m.  |
| <i>Dimeresia howellii</i>                            | doublet                   | None                   | None                 | 2.3       |                | Pinyon-juniper woodland.   | On slopes in dry gravelly volcanic soils. 1330-2300m.   |
| <i>Carex parryana</i> var. <i>hallii</i>             | Parry's sedge             | None                   | None                 | 2.3       |                | Meadows, subalpine coniferous forest.  | One collection in California near Station Peak in the White Mtns. 2850-3200m.   |
| <i>Phlox muscoides</i>                               | squarestem phlox          | None                   | None                 | 2.3       |                | Alpine boulder and rock field, subalpine coniferous forest, Great Basin scrub. | Open rocky slopes. 1270-2700m.  |
| <i>Boschniakia hookeri</i>                           | small groundcone          | None                   | None                 | 2.3       |                | North Coast coniferous forest.   | Open woods, shrubby places, generally on <i>Gaultheria shallon</i> . 90-885m.   |
| <i>Muhlenbergia fragilis</i>                         | delicate muhly            | None                   | None                 | 2.3       |                | Pinyon-juniper woodland.   | Open, more-or-less disturbed limestone gravelly wash. 515m in California.   |
| <i>Lomatium ravenii</i>                              | Raven's lomatium          | None                   | None                 | 2.3       |                | Great Basin scrub.   | Open, slightly alkaline flats, poorly drained adobe soils. Often with <i>Artemisia tridentata</i> , <i>Grayia</i> , etc. 1000-3000m.    |
| <i>Chaenactis douglasii</i> var. <i>alpina</i>       | alpine dusty maidens      | None                   | None                 | 2.3       |                | Alpine boulder and rock fields.  | Open, subalpine to alpine gravel and crevices; granitic substrate. 2725-3400m.  |
| <i>Sedum divergens</i>                               | Cascade stonecrop         | None                   | None                 | 2.3       |                | Alpine boulder and rock field.   | Rocky alpine slopes and cool cliffs. 1520-2000m.  |
| <i>Blepharidachne kingii</i>                         | King's eyelash grass      | None                   | None                 | 2.3       |                | Pinyon-juniper woodland, Mojavean desert scrub.                                | Rocky benches and alluvial fans on limestone. 480-2125m.  |
| <i>Achnatherum aridum</i>                            | Mormon needle grass       | None                   | None                 | 2.3       |                | Joshua tree woodland, pinyon-juniper woodland.                                 | Rocky limestone ridges. 500-2570m.  |
| <i>Erioneuron pilosum</i>                            | hairy erioneuron          | None                   | None                 | 2.3       |                | Pinyon-juniper woodland.   | Rocky or gravelly places; can be on carbonate. 1500-2000m.  |
| <i>Erigeron compactus</i>                            | compact daisy             | None                   | None                 | 2.3       |                | Pinyon-juniper woodland.   | Rocky or gravelly sites. Limestone. 1300-2900m.   |
| <i>Hulsea nana</i>                                   | little hulsea             | None                   | None                 | 2.3       |                | Alpine boulder and rock field, subalpine coniferous forest.                    | Rocky or gravelly sites; on volcanic substrates. 1920-3355m.  |
| <i>Heuchera rubescens</i> var. <i>versicolor</i>     | San Diego County alumroot | None                   | None                 | 2.3       |                | Chaparral, lower montane coniferous forest.                                    | Rocky outcrops. 1500-4000m.   |
| <i>Digitaria californica</i>                         | Arizona cottontop         | None                   | None                 | 2.3       |                | Sonoran desert scrub, Mojavean desert scrub.                                   | Rocky schist hillsides in California; open plains out of state. 290-1490m.  |

Table J-2b. Plant Species Considered in this EIR (Upland species)

| Scientific Name  | Common name                    | Federal listing status | Calif listing status | CNPS List | Other Status | General Habitat  | Micro-Habitat  |
|--|--------------------------------|------------------------|----------------------|-----------|--------------|--|--|
| <i>Penstemon utahensis</i>                                   | Utah beardtongue               | None                   | None                 | 2.3       |              | Chenopod scrub, Great Basin scrub, Mojavean desert scrub, pinyon-juniper woodland. | Rocky sites. 1065-2500m.   |
| <i>Leymus salinus</i> ssp. <i>mojavensis</i>                 | hillside wheat grass           | None                   | None                 | 2.3       |              | Pinyon-juniper woodland.   | Rocky sites. 1350-2135m.   |
| <i>Balsamorhiza serrata</i>                                  | serrated balsamroot            | None                   | None                 | 2.3       |              | Great Basin scrub.   | Rocky sites. 1400-1600m.   |
| <i>Romanzoffia tracyi</i>                                    | Tracy's romanzoffia            | None                   | None                 | 2.3       |              | Coastal bluff scrub, coastal scrub.  | Rocky sites. 15-30m.   |
| <i>Teucrium glandulosum</i>                                  | desert germander               | None                   | None                 | 2.3       |              | Sonoran desert scrub.  | Rocky sites. 400-500m.   |
| <i>Menodora scabra</i>                                       | rough menodora                 | None                   | None                 | 2.3       |              | Joshua tree woodland, Mojavean desert scrub, pinyon and juniper woodland.          | Rocky soils; canyons. 1200-1800m.  |
| <i>Lomatium hendersonii</i>                                  | Henderson's lomatium           | None                   | None                 | 2.3       |              | Pinyon-juniper woodland, Great Basin scrub.  | Rocky, clay soils. 1400-2440m.   |
| <i>Silene suksdorfii</i>                                     | Cascade alpine campion         | None                   | None                 | 2.3       |              | Alpine boulder and rock field, subalpine coniferous forest.                        | Rocky, volcanic soils. 2400-3100m.   |
| <i>Ayenia compacta</i>                                       | California ayenia              | None                   | None                 | 2.3       |              | Mojavean desert scrub, Sonoran desert scrub.                                       | Sandy and gravelly washes in the desert; dry desert canyons. 150-1095m.  |
| <i>Psoralidium lanceolatum</i>                               | lance-leaved scurf-pea         | None                   | None                 | 2.3       |              | Great Basin scrub.   | Sandy clearings in Great Basin and winter fat scrub, and, outside of California, on alluvial plains. 1220-2500m. |
| <i>Eriogonum nutans</i> var. <i>nutans</i>                   | Dugway wild buckwheat          | None                   | None                 | 2.3       |              | Great Basin scrub, chenopod scrub.   | Sandy or gravelly sites; also cited as often in greasewood scrub in flat, silty areas. 1220-3000m.               |
| <i>Eriogonum pyrolifolium</i> var. <i>pyrolifolium</i>       | pyrola-leaved buckwheat        | None                   | None                 | 2.3       |              | Alpine boulder and rock field.   | Sandy or gravelly sites; on pumice. 1675-3200m.  |
| <i>Allium nevadense</i>                                      | Nevada onion                   | None                   | None                 | 2.3       |              | Pinyon-juniper woodland.   | Sandy or gravelly slopes in desert mountains. 1300-1700m.  |
| <i>Calliandra eriophylla</i>                                 | pink fairy-duster              | None                   | None                 | 2.3       |              | Sonoran desert scrub.  | Sandy or rocky sites in the desert. 120-1500m.   |
| <i>Poa lettermanii</i>                                       | Letterman's blue grass         | None                   | None                 | 2.3       |              | Alpine boulder and rock field.   | Sandy or rocky sites. 3500-4265m.  |
| <i>Spermolepis echinata</i>                                  | bristly scaleseed              | None                   | None                 | 2.3       |              | Sonoran desert scrub.  | Sandy or rocky sites. 60-1500m.  |
| <i>Malperia tenuis</i>                                       | brown turbans                  | None                   | None                 | 2.3       |              | Sonoran desert scrub.  | Sandy places and rocky slopes. 15-335m.  |
| <i>Camissonia boothii</i> ssp. <i>intermedia</i>             | Booth's hairy evening-primrose | None                   | None                 | 2.3       |              | Great Basin scrub, pinyon-juniper woodland.  | Sandy sites. 1500-2150m.   |
| <i>Chamaesyce parryi</i>                                     | Parry's spurge                 | None                   | None                 | 2.3       |              | Desert dunes, Mojavean desert scrub.   | Sandy sites. 395-730m.   |
| <i>Tripterocalyx micranthus</i>                              | small-flowered sand-verbena    | None                   | None                 | 2.3       |              | Desert dunes, Mojavean desert scrub.   | Sandy sites. 550-855m.   |
| <i>Camissonia minor</i>                                      | Nelson's evening-primrose      | None                   | None                 | 2.3       |              | Chenopod scrub, Great Basin scrub.   | Sandy slopes, flats. 1200-1220m.   |
| <i>Arabis cobrensis</i>                                      | Masonic rock-cress             | None                   | None                 | 2.3       |              | Great Basin scrub, pinyon-juniper woodland.  | Sandy soils. 1375-2800m.   |
| <i>Chamaesyce arizonica</i>                                  | Arizona spurge                 | None                   | None                 | 2.3       |              | Sonoran desert scrub.  | Sandy soils. 50-300m.  |
| <i>Lupinus pusillus</i> var. <i>intermontanus</i>            | intermontane lupine            | None                   | None                 | 2.3       |              | Great Basin scrub.   | Sandy soils. 1220-1600m.   |
| <i>Rumex venosus</i>   | winged dock                    | None                   | None                 | 2.3       |              | Great Basin scrub.   | Sandy substrates; broadly distributed; just barely gets into California at Honey Lake Valley. 1200-1800m.        |
| <i>Pyrocoma racemosa</i> var. <i>congesta</i>                | Del Norte pyrocoma             | None                   | None                 | 2.3       |              | Chaparral, lower montane coniferous forest.  | Serpentine soils, from dry roadsides to damp hills; often in forest openings. 200-1000m.                         |
| <i>Phacelia anelsonii</i>                                    | Aven Nelson's phacelia         | None                   | None                 | 2.3       |              | Joshua tree woodland, pinyon and juniper woodland.                                 | Shady places in rich soil, base of sandstone or limestone cliffs, among rocks or in washes. 1200-1575m.          |
| <i>Maurandya antirrhiniflora</i> ssp. <i>antirrhiniflora</i> | violet twining snapdragon      | None                   | None                 | 2.3       |              | Joshua tree woodland, Mojavean desert scrub.                                       | Steep rocky carbonate slopes. 760-1525m.   |
| <i>Claytonia umbellata</i>                                   | Great Basin claytonia          | None                   | None                 | 2.3       |              | Subalpine coniferous forest.   | Talus slopes, stony flats, crevices. 1285(?) - 3520m.  |
| <i>Asarum marmoratum</i>                                     | marbled wild-ginger            | None                   | None                 | 2.3       |              | Lower montane coniferous forest.   | Understory of coniferous forests. 200-1800m.   |
| <i>Androsace occidentalis</i> var. <i>simplex</i>            | simple androsace               | None                   | None                 | 2.3       |              | Upper montane coniferous forest.   | Usually in mesic sites. 1675-1700m.  |
| <i>Juncus dudleyi</i>  | Dudley's rush                  | None                   | None                 | 2.3       |              | Lower montane coniferous forest (mesic).   | Wet areas in forest. 455-2000m.  |