ruddy duck (*Oxyura jamaicensis*), red shouldered hawk (*Buteo lineatus*), red-tailed hawk (*Buteo jamaicensis*), American kestrel (*Falco sparverius*), American coot (*Fulica americana*), killdeer (*Charadrius vociferus*), rock dove (*Columbia livia*), mourning dove (*Zenaida macroura*), pygmy nuthatch (*Sitta pygmaea*), brown creeper (*Certhia americana*), Bewick's wren (*Thryomanes bewickii*), American robin (*Turdus migratorius*), and pine siskin (*Carduelis pinus*).

Montane conifer habitats in the San Bernardino Mountains typically experience mild, warm summer months. Given the mild climate and abundance of nesting habitat, several bird species are expected to occur on the project site during the breeding season. Common breeding bird species observed on the project site during surveys include Anna's hummingbird and western wood-peewee (*Contopus sordidulus*). Other common breeding species expected to occur on the project site include the spotted sandpiper (*Actitis macularia*), violet green swallow (*Tachycineta thalassina*), and yellow-rumped warbler (*Dendroica coronata*).

Mammals

The ornate shrew (*Sorex ornatus*), brush mouse (*Peromyscus boylii*), western grey squirrel (*Sciurus griseus*), California ground squirrel (*Spermophilus beecheyi*), dusky-footed woodrat (*Neotoma fuscipes*), California vole (*Microtus californicus*), and coyote (*Canis latrans*) were observed on the project site during the surveys. Several additional species are expected to occur. These include small mammals such as the dusky shrew (*Sorex monticolus*), broad-footed mole (*Scapanus latimanus*), Merriam's chipmunk (*Tamias merriami*), lodgepole chipmunk (*Tamias speciosus*), golden-mantled ground squirrel (*Spermophilus lateralis*), deer mouse (*Peromyscus maniculatus*), western harvest mouse (*Reithrodontomys megalotis*), Botta's pocket gopher (*Thomomys bottae*), and house mouse (*Mus musculus*). Easily detectable mammals that are expected to occur on the site include the Virginia opossum (*Didelphis virginiana*), porcupine (*Erethizon dorsatum*), long-tailed weasel (*Mustela frenata*), striped skunk (*Mephitis mephitis*), raccoon (*Procyon lotor*), mule deer (*Odocoileus hemionus*), and bobcat (*Felis rufus*). Larger mammals that may occur on the project site include the gray fox (*Urocyon cinereoargenteus*), black bear (*Ursus americanus*), badger (*Taxidea taxus*), and mountain lion (*Felis concolor*).

Bats occur throughout most of southern California and may use any portion of the project site as foraging habitat. Most of the bats that could potentially occur onsite are inactive during the winter and either hibernate or migrate, depending on the species. The California myotis (*Myotis californicus*) and big brown bat (*Eptesicus fuscus*) may occur on the project site. Gaps in peeling bark and hollow snags or limbs provide potential roosting and maternal colony opportunities for these and other bat species.

3.2.2 Wildlife Movement

Wildlife movement activities usually fall into one of three movement categories: (1) dispersal (e.g. juvenile animals from natal areas, individuals extending range distributions); (2) seasonal

migration; and (3) movements related to home range activities (e.g., foraging for food or water, defending territories, searching for mates, accessing breeding areas, or securing cover). A number of terms have been used in various wildlife movement studies, such as "travel route," "wildlife corridor," and "wildlife crossing" to refer to areas in which wildlife move from one area to another.

To clarify the meaning of these terms and to facilitate the discussion on wildlife movement in this analysis, these terms are briefly defined as follows:

- *Travel Route* - a landscape feature such as a ridgeline, drainage, canyon, or riparian strip within a larger natural habitat area that is used frequently by animals to facilitate movement and provide access to necessary resources (e.g., water, food, cover, den sites).

- *Wildlife Corridor* - a piece of habitat, usually linear in nature, that connects two or more habitat patches that would otherwise be fragmented or isolated from one another.

- *Wildlife Crossing* - a small, narrow area, relatively short in length and generally constricted in nature, that allows wildlife to pass under or through an obstacle or barrier that otherwise hinders or prevents movement.

As defined above, the project site does not contain wildlife crossings or corridors. The project site could be used as a travel route connecting forest habitat to the north with Big Bear Lake. However, direct connection to open space areas north and east of the project site are obstructed by Highway 38. The importance of this travel route may be diminished by the vehicle traffic hazard associated with crossing Highway 38 as well as the availability of similar habitat adjacent to the east of the project site.

3.3 SPECIAL STATUS BIOLOGICAL RESOURCES

The following section addresses special status biological resources observed, reported, or having the potential to occur on the project site. These resources include plant and wildlife species that have been afforded special status and/or recognition by federal and state resource agencies, as well as the California Native Plant Society (CNPS). In general, the principal reason an individual taxon (i.e., species, subspecies, or variety) is given such recognition is the documented or perceived decline or limitations of its population size, geographic range, and/or distribution resulting in most cases from habitat loss. A summary of special status plant and wildlife species known to occur in the project region including information on the status, potential for occurrence, and definitions for the various status designations are presented in Tables 1 and 2, respectively. In addition, special status biological resources include vegetation types and habitats that are either unique, of relatively limited distribution in the region, or of particularly high wildlife value. These resources have been defined

by federal, state, and local government conservation programs. Sources used to determine the special status of biological resources are as follows:

- Plants – *Electronic Inventory of Rare and Endangered Vascular Plants of California.* (California Native Plant Society [CNPS] [2000]). California Natural Diversity DataBase (CNDDB) *List of Special Plants* (CDFG [2002]). Various Federal Register notices from the USFWS regarding listing status of plant species.

- Wildlife – California Wildlife Habitat Relationships Database System (CDFG 1991); CNDDB (CDFG 2000), Various Federal Register notices from the USFWS regarding listing status of wildlife species.

- Habitats – CNDDB (CDFG 2000).

TABLE 2
SPECIAL STATUS PLANT SPECIES POTENTIALLY OCCURRING WITHIN THE PROJECT REGION

Species	Status[1]			Likelihood for Occurrence
	USFWS	CDFG	CNPS	
Abronia nana ssp. *covillei* Coville's dwarf abronia	—	—	4	Low; marginally suitable habitat
Allium parishii Parish's onion	—	—	4	Low; above known elevation range
Antennaria marginata White-margined everlasting	—	—	2	None; outside of known geographic range (only local occurrences in Barton Flats area)
Arabis breweri var. *pecuniaria* San Bernardino rock-cress	—	—	1B	None; far below known elevation range
Arabis dispar Pinyon rock-cress	—	—	2	None; outside known geographic range (only occurs on desert-facing slopes)
Arabis parishii Parish's rock-cress	—	—	1B	Observed
Arabis shockleyi Shockley's rock-cress	—	—	2	None; outside known geographic range (only local occurrences on desert-facing slopes)
Arenaria lanuginosa ssp. *Saxosa* Rock sandwort	—	—	2	Moderate; marginally suitable habitat
Arenaria ursina Big Bear Valley sandwort	FT	—	1B	High; suitable habitat
Astragalus albens Cushenbury milk-vetch	FE	—	1B	None; no suitable habitat (carbonate soils)
Astragalus bicristatus Crested milk-vetch	—	—	4	High; suitable habitat
Astragalus lentiginosus var. *Sierrae* Big Bear Valley milk-vetch	—	—	1B	High; suitable habitat
Astragalus leucolobus Big Bear Valley woollypod	—	—	1B	Observed
Atriplex parishii Parish's smallscale	—	—	1B	None; no suitable habitat (alkali sink)

TABLE 2 (continued)
SPECIAL STATUS PLANT SPECIES POTENTIALLY OCCURRING WITHIN THE PROJECT REGION

Species	Status[1]			Likelihood for Occurrence
	USFWS	CDFG	CNPS	
Berberis fremontii Fremont's barberry	—	—	3	None; no suitable habitat (presumed extinct in Cushionbury area)
Botrychium crenulatum Scalloped moonwort	—	—	2	None; no suitable habitat (marshes, bogs)
Calochortus palmeri var. *palmeri* Palmer's mariposa lily	—	—	1B	Moderate; marginally suitable habitat
Calochortus plummerae Plummer's mariposa lily	—	—	1B	None; above known elevation range
Castilleja cinerea Ash-gray Indian paintbrush	FT	—	1B	Observed
Castilleja lasiorhyncha San Bernardino Mountain owl's clover	—	—	1B	High; suitable habitat
Dryopteris filix-mas Male fern	—	—	2	Low; local rarity; outside known range
Dudleya abramsii ssp. *affinis* San Bernardino Mountains dudleya	—	—	1B	Moderate; marginally suitable habitat
Erigeron breweri var. *jacinteus* San Jacinto Mountains daisy	—	—	4	None; below known elevation range
Erigeron parishii Parish's daisy	FT	—	1B	None; no suitable habitat (carbonate soils)
Erigeron unicaulis Limestone daisy	—	—	2	None; outside known geographic range (local reports erroneous)
Eriogonum foliosum Leafy buckwheat	—	—	1B	High; suitable habitat
Eriogonum kennedyi var. *austromontanum* Southern mountain buckwheat	FT	—	1B	Low; suitable habitat (see text)
Eriogonum ovalifolium var. *vineum* Cushenbury buckwheat	FE	—	1B	None; no suitable habitat (carbonate soils)
Eriophyllum lanatum var. obovatum Southern Sierra wooly sunflower	—	—	4	Low; margin of known geographic range
Fimbristylis thermalis Hot springs fimbristylis	—	—	4	None; no suitable habitat (alkaline meadows, hot springs)
Galium jepsonii Jepson's bedstraw	—	—	4	High; suitable habitat
Galium johnsttonii Johnston's bedstraw	—	—	4	High; suitable habitat
Gentiana fremontii Moss gentian	—	—	2	None; below known elevation range
Gilia leptantha ssp. *leptantha* San Bernardino Mountains gilia	—	—	1B	Low (see text)
Helianthus nuttalli ssp. *parishii* Los Angeles sunflower	—	—	1A	None; presumed extinct, above known elevation range
Heuchura hirsutissima Shaggy-haired alum root	—	—	1B	Low; limited suitable habitat
Heuchura parishii Parish's alumroot	—	—	1B	Low; limited suitable habitat
Horkelia wilderae Barton Flats horkelia	—	—	1B	None; outside known geographic range, endemic to Barton Flats area

TABLE 2 (continued)
SPECIAL STATUS PLANT SPECIES POTENTIALLY OCCURRING WITHIN THE PROJECT REGION

Species	Status[1]			Likelihood for Occurrence
	USFWS	CDFG	CNPS	
Hulsea vestita ssp. *parryi* Parry's sunflower	—	—	4	None; outside known geographic range (only occurs on desert-facing slopes)
Hulsea vestita ssp. *pygmaea* Pygmy hulsea	—	—	1B	None; below elevation range
Ivesia argyrocoma Silver-haired ivesia	—	—	1B	Observed
Juncus duranii Duran's rush	—	—	4	High; suitable habitat
Lesquerella kingii var. *bernardina* San Bernardino Mountains bladderpod	FE	—	1B	None; no suitable habitat (carbonate soils)
Lewisia brachycalyx Short-sepaled lewisia	—	—	2	Moderate; limited suitable habitat
Lilium humbodtii ssp. *ocellatum* *Ocellated Humboldt lily*	—	—	4	None; above known elevation range
Lillium parryi Lemon lily	—	—	1B	Low; limited suitable habitat
Linanthus killipii Baldwin Lake linanthus	—	—	1B	High; suitable habitat
Malaxiis monohyllos ssp. *brachypoda* Adder's mouth	—	—	2	None; below known elevation range
Mimulus exiguus San Bernardino Mountain monkeyflower	—	—	1B	High; suitable habitat
Mimulus purpureus var. *purpureus* Purple monkeyflower	—	—	2	High; suitable habitat
Monardella macrantha ssp. *hallii* Hall's monardella	—	—	1B	None; outside known geographic range
Navarretia peninsularis Baja navarretia	—	—	1B	Low; limited suitable habitat
Oxytheca caryophylloides Chickweed oxytheca	—	—	4	High; suitable habitat
Oxytheca parishii var. *cienegensis* Cienega seca oxytheca	—	—	1B	None; outside known geographic range
Oxytheca parishii var. *goodmaniana* Cushenbury oxytheca	FE	—	1B	None; no suitable habitat (carbonate soils)
Oxytropis oreophila Mountain oxytrope	—	—	2	None; below known elevation range
Perideridia parishii ssp. *parishii* Parish's yampah	—	—	2	High; suitable habitat
Phacelia exilis Transverse Range phacelia	—	—	4	High; suitable habitat
Phacelia mohavensis Mojave phacelia	—	—	4	High; suitable habitat
Phlox dolichantha Bear Valley phlox	—	—	1B	High; suitable habitat
Poa atropurpurea San Bernardino bluegrass	FE	—	1B	High; suitable habitat
Poliomintha incana Frosted mint	—	—	1A	None; no suitable habitat (dunes and sandy flats), above known elevation range

TABLE 2 (continued)
SPECIAL STATUS PLANT SPECIES POTENTIALLY OCCURRING WITHIN THE PROJECT REGION

Species	Status[1]			Likelihood for Occurrence
	USFWS	CDFG	CNPS	
Polystichum kruckebergii Krukeberg's sword fern	—	—	4	None; limited suitable habitat, outside known geographic distribution
Populus angustifolia Narrow-leaved cottonwood	—	—	2	None; outside known geographic range
Pyrrocoma uniflora ssp. *gossypina* Bear Valley pyrrocoma	—	—	1B	High; suitable habitat
Rupertia rigida Parish's rupertia	—	—	4	High; suitable habitat
Scutellaria bolanderi ssp. *austromntanum* Southern mountain skullcap	—	—	1B	None, outside known geographic range, above known elevation range
Sedum niveum Davidson's stonecrop	—	—	4	None; no suitable habitat (rock ledges and cliffs)
Selaginella asprella Bluish spike-moss	—	—	4	Low; limited suitable habitat
Senecio bernardinus San Bernardino butterweed	—	—	1B	Low; limited suitable habitat
Senecio ionophyllus Tehachapi ragwort	—	—	4	Low; limited suitable habitat
Sidalcea hickmanii ssp. *parishii* Parish's checkerbloom	C	R	1B	Low; limited suitable habitat
Sidalcea pedata Bird's foot checkerbloom	FE	SE	1B	Low to moderate (see text); suitable habitat
Sphenopholis obtusata Prairie wedge grass	—	—	2	High; suitable habitat
Streptanthus bernardinus Laguna Mountains jewelflower	—	—	4	High; suitable habitat
Streptanthus campestris Southern jewelflower	—	—	1B	High; suitable habitat
Swertia neglecta Pine green-gentian	—	—	4	High; suitable habitat
Taraxacum californicum California dandelion	FE	—	1B	Low to moderate (see text); suitable habitat
Thelypodium stenopetalum Slender-petaled thelypodium	FE	—	1B	None; no suitable habitat (alkaline meadows)
Trichostema micranthum Small-flowered bluecurls	—	—	4	High; suitable habitat
Viola pinetorum ssp. *grisea* Grey-leaved violet	—	—	1B	Low; outside known geographic range

TABLE 2 (continued)
SPECIAL STATUS PLANT SPECIES POTENTIALLY OCCURRING WITHIN THE PROJECT REGION

Species	Status[1]			Likelihood for Occurrence
	USFWS	CDFG	CNPS	
STATUS DEFINITIONS				
USFWS				
FE: Species designated as endangered under the federal Endangered Species Act. Endangered = "any species in danger of extinction throughout all or a significant portion of its range."				
FT: Species designated as threatened under the Federal Endangered Species Act. Threatened = "species likely to become an endangered species within the foreseeable future throughout all or a significant portion of its range."				
FPE: Proposed for federal listing as Endangered.				
FPT: Proposed for federal listing as Threatened.				
C: Candidate for federal listing as Threatened or Endangered.				
SOC: Species of Concern				
CDFG				
ST: Threatened = "a species that, although not presently threatened with extinction, is likely to become an endangered species in the foreseeable future in the absence of the special protection and management efforts required by this Act" (California Endangered Species Act).				
SE: Endangered = "a species is endangered when its prospects of survival and reproduction are in immediate jeopardy from one or more causes."				
R: Rare				
CNPS				
1A Plants Presumed Extinct in California				
1B Plants Rare, Threatened, or Endangered in California and Elsewhere				
2 Plants Rare, Threatened, or Endangered in California But More Common Elsewhere				
3 Plants About Which We Need More Information- A Review List				
4 Plants of Limited Distribution - A Watch List				

TABLE 3
SPECIAL STATUS WILDLIFE SPECIES POTENTIALLY OCCURRING WITHIN THE PROJECT REGION

Species	Status[1]		Likelihood for Occurrence
	USFWS	CDFG	
Invertebrates			
Euchloe hyantis ssp. *andrewsi* Andrews' marble butterfly	SOC	—	Low; above known elevation range, limited suitable habitat
Amphibians			
Ensatina escholtzii croceater Yellow-blotched salamander	SOC	SSC	Low; limited marginally suitable habitat
Ensatina escholtzii klauberi Large-blotched salamander	SOC	SSC	None; above known elevation range, outside known geographic range
Rana muscosa Mountain yellow-legged frog	FPE	SSC	None; no suitable habitat
Scaphiopus hamondii Western spadefoot toad	SOC	SSC	None; above known elevation range
Taricha torosa torosa Coast range newt	SOC	SSC	None; no suitable habitat, above known elevation range
Reptiles			
Anniella pulchra pulchra Silvery legless lizard	SOC	SSC	Low; above known elevation range
Charina bottae umbricata Southern rubber boa	SOC	ST	Low; limited suitable habitat
Cnemidophorus tigris multiscutatus Coastal western whiptail	SOC	—	Moderate; suitable habitat
Coleonyx variegatus abbotti San Diego banded gecko	SOC	—	None; above known elevation range, no suitable habitat
Diadophis punctatus modestus San Bernardino ringneck snake	SOC	—	Low; limited suitable habitat
Lampropeltis zonata parvirubra San Bernardino Mountain kingsnake	SOC	—	Moderate; marginally suitable habitat
Lichanura trivirgata roseofusca Coastal rosy boa	SOC	—	None; above known elevation range
Phrynosoma coronatum ssp. *blainvillei* San Diego coast horned lizard	SOC	SSC/P	None; above known elevation, lack of suitable habitat
Sceloporus graciosus vendenbergianus Southern sagebrush lizard	SOC	—	Observed
Salvadora hexalepis virgultea Coast patch-nosed snake	SOC	SSC	None; lack of suitable habitat, above known elevation
Thamnophis hammondii hammondii Two-striped garter snake	—	SSC	None; no suitable habitat

TABLE 3 (continued)
SPECIAL STATUS WILDLIFE SPECIES POTENTIALLY OCCURRING WITHIN THE PROJECT REGION

Species	Status[1]		Likelihood for Occurrence
	USFWS	CDFG	
Birds			
Accipiter cooperii Cooper's hawk	–	SSC	Nesting: Moderate Foraging: High
Accipiter gentilis Northern goshawk	SOC	SSC	Nesting: None Foraging: Moderate
Accipiter striatus Sharp-shinned hawk	–	SSC	Nesting: None Foraging: High in winter
Aimophila ruficeps canescens Southern California rufous-crowned sparrow	SOC	SSC	Nesting: None Foraging: None; above known elevation range
Amphispiza belli belli Bell's sage sparrow	SOC	SSC	Nesting: None Foraging: None; above known elevation range
Aquila chrysaetos Golden eagle	–	SSC	Nesting: None Foraging: High
Asio otus Long-eared owl	–	SSC	Nesting: Low Foraging: Moderate
Buteo regalis Ferruginous hawk	SOC	SSC	Nesting: None Foraging: Low in winter
Circus cyaneus Northern harrier	–	SSC	Nesting: None Foraging: Low
Cypseloides niger Black swift	–	SSC	Nesting: None Foraging: Moderate
Dendroica petechia Yellow warbler	–	SSC	Nesting: None Foraging: Moderate
Elanus leucereus White-tailed kite	–	FP	Nesting: Low Foraging: Low
Empidonax traillii extimus Southwestern willow flycatcher	FE	SE	Nesting: Low Foraging: Moderate; rare migrant
Eremophila alpestris actia California horned lark	–	SSC	Nesting: None Foraging: None; above known elevation range
Falco columbaris Merlin	–	SSC	Nesting: None Foraging: Low
Falco mexicanus Prairie falcon	–	SSC	Nesting: None Foraging: Low
Falco peregrinus anatum American Peregrine falcon	–	FE	Nesting: None Foraging : Low
Haliaeetus leucocephalus Bald eagle	FE	SE	Nesting: None Foraging: Observed in winter

TABLE 3 (continued)
SPECIAL STATUS WILDLIFE SPECIES POTENTIALLY OCCURRING WITHIN THE PROJECT REGION

Species	Status[1]		Likelihood for Occurrence
	USFWS	CDFG	
Lanius ludovicianus Loggerhead shrike	SOC	SSC	Nesting: None Foraging: None; above known elevation range
Piranga flava Hepatic tanager	–	SSC	Nesting: Low Foraging: Low
Progne subis Purple martin	–	SSC	Nesting: Low Foraging: Low; local rarity
Strix occidentalis occidentalis California spotted owl	SOC	SSC	Nesting: Low/None observed during focused surveys Foraging: High/Observed in close proximity to project site
Vireo vicinior Gray vireo	–	SSC	Nesting: None Foraging: Low
Mammals			
Antrozus pallidus Pallid bat	–	SSC	Roosting: Low Foraging: Low
Euderma maculatum Spotted bat	SOC	SSC	Roosting: None Foraging: Moderate
Eumops perotis californicus California mastiff bat	SOC	SSC	Roosting: None Foraging: Low
Glaucomys sabrinus californicus San Bernardino Mountian flying squirrel	SOC	SSC	Breeding: Low Foraging: High
Myotis ciliolabrum Small-footed myotis	SOC	–	Roosting: Low Foraging: High
Myotis evotis Long-eared myotis	SOC	–	Roosting: High Foraging: High
Myotis lucifugus Occult little brown bat	SOC	SSC	Roosting: High Foraging: High
Myotis thysanodes Fringed myotis	SOC	–	Roosting: Low Foraging: Moderate
Myotis volans Long-legged myotis	SOC	–	Roosting: Moderate Foraging: Moderate
Myotis yumanensis Yuma myotis	SOC	–	Roosting: Low Foraging: Moderate
Onychomys torridus ramona Southern grasshopper mouse	SOC	SSC	None; no suitable habitat
Perognathus alticola alticola White-eared pocket mouse	SOC	SSC	None; presumed extinct locally
Plecotus townsendii townsendii Pacific western big-eared bat	SOC	SSC	Roosting: None Foraging: Moderate

TABLE 3 (continued)
SPECIAL STATUS WILDLIFE SPECIES POTENTIALLY OCCURRING WITHIN THE PROJECT REGION

Species	Status[1]		Likelihood for Occurrence
	USFWS	CDFG	
Status Definitions1 USFWS FE: Species designated as Endangered under the Federal Endangered Species Act. Endangered = "any species in danger of extinction throughout all or a significant portion of its range." FT: Species designated as Threatened under the Federal Endangered Species Act. Threatened = "species likely to become an Endangered species within the foreseeable future throughout all or a significant portion of its range." FPE: Proposed for federal listing as Endangered. FPT: Proposed for federal listing as Threatened. SOC: Species of Concern CDFG SR: Rare = "a species is rare when, although not presently Threatened with extinction, it is in such small numbers throughout its range that it may become Endangered if its present environment worsens." ST: Threatened = "a species that, although not presently Threatened with extinction, is likely to become an Endangered species in the foreseeable future in the absence of the special protection and management efforts required by this Act (California Endangered Species Act)." SE: Endangered = "a species is endangered when its prospects of survival and reproduction are in immediate jeopardy from one or more causes." SSC: Species of Special Concern. FP: Fully Protected species are protected by special legislation and cannot be taken at any time. P: Protected species are also protected by special legislation and can only be taken with a permit issued by the CDFG.			

3.3.1 Definitions of Special Status Biological Resources

Special status habitats are vegetation types, associations, or subassociations that support concentrations of special status plant or wildlife species, are of relatively limited distribution, or are of particular value to wildlife. Although special status habitats are not afforded legal protection unless they support protected species, potential impacts on them may increase concerns and mitigation suggestions by resources agencies.

A **federally-listed Endangered species** is a species facing extinction throughout all or a significant portion of its geographic range. A **federally-listed Threatened species** is a species likely to become endangered within the foreseeable future throughout all or a significant portion of its range. The presence of any federally Threatened or Endangered species on an area proposed development leads to a CEQA documentation of "significance" and (for wildlife or, where there is a federal nexus, for plants) requires consultation with USFWS, particularly if development would result in "take" of the species or its habitat. The term "take" means to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, collect, or attempt to engage in such conduct. Harm in this sense can include any disturbance to habitats used by the species during any portion of its life history.

Proposed species are those officially proposed by the USFWS for addition to the federal Threatened and Endangered species list. Because proposed species may become listed as

Threatened or Endangered prior to or during implementation of a proposed development project, they are treated here as though they are listed species.

The State of California considers an **Endangered species,** a species whose prospects of survival and reproduction are in immediate jeopardy. **Threatened species** is a species in such small numbers throughout its range that it is likely to become an Endangered species in the near future in the absence of special protection or management. A **Rare species** is one present in such small numbers throughout its range that it may become Endangered if its present environment worsens. Rare species applies to California native plants listed prior to the State Endangered Species Act. State Threatened and Endangered species are fully protected against take unless an incidental take permit is obtained from the wildlife agencies.

Federal Species of Concern are species (a "term of art" for former Category 2 candidates) with an informal designation by the USFWS for some declining species that are not federal candidates for listing at this time, but are noted in the CNDDB (CDFG 2002a). This list of species is not actively maintained by the USFWS.

California Species of Special Concern is an informal designation used by the CDFG for some declining wildlife species that are not state candidates. This designation does not provide legal protection, but signifies that these species are recognized as special status by the CDFG.

Species that are **California Fully Protected** and **Protected** include those protected by special legislation for various reasons, such as the mountain lion and white-tailed kite. Fully Protected Species may not be taken or possessed at any time. California Protected Species include those species that may not be taken or possessed at any time except under special permit from the department issued pursuant to Sections 650 and 670.7 of the California Code of Regulations, or Section 2081 of the Fish and Game Code.

Special Plant and **Special Animal** are general terms that refer to all of the species the CNDDB is interested in tracking, regardless of their legal or protection status. This term includes species designated as any of the above terms but also includes species that may be considered biologically rare, restricted in distribution, declining throughout their range, are on the periphery of their range and are threatened with extirpation in California, are associated with special status habitats, or are considered by other state or federal agencies or private organizations to be sensitive or declining. Species of **Local Concern** are those that have no official status with the resource agencies, but are being watched because either there is a unique population in the region or the species is declining in the region.

The California Native Plant Society is a private organization that has developed an inventory of California's special status plant species (CNPS 2001). This inventory summarizes the distribution, rarity, and endangerment of California's vascular plants. This rare plant inventory is comprised of four lists. CNPS presumes that **List 1A** plant species are extinct in California because they have not

been seen in the wild for many years. CNPS considers **List 1B** plants as rare, threatened, or endangered throughout their range. **List 2** plant species are considered rare, threatened, or endangered in California but more common elsewhere. Plant species for which CNPS needs additional information are included on **List 3**. **List 4** plant species are those of limited distribution in California whose susceptibility to threat appears low at this time.

3.3.2 Special Status Vegetation Types

Pebble Plain

The pebble plain community found on the project site is recognized as a special status vegetation type by local, state, and federal resources agencies. Pebble plain (also called pavement plain) is endemic to a 92-square-mile area in the San Bernardino Mountains at elevations between 6,000 and 7,500 feet above msl (Stephenson and Calcarone 1999). Vegetation structure of pebble plain habitat is similar to the mat-forming structure of alpine sites at much higher elevations (Derby and Wilson 1978). Vegetation consists largely of well-spaced cushion-forming perennials and a variety of tiny annuals. Bunchgrasses and some succulents may also occur. Several special status plants, including Threatened or Endangered species, are known to occur on pebble plain and are discussed in the special status plant section.

Pebble plain on the project site occurs as a distinct open patch within the surrounding open Jeffrey pine forest. Much of the pebble plain habitat on the project site has been subjected to disturbance by unauthorized off-road vehicle use. The disturbance has reduced vegetation cover, disturbed the natural hydrologic pattern, and perhaps reduced habitat quality for special status plants. However, based on National Forest management efforts at other sites, vehicle disturbance apparently does not permanently alter habitat suitability of this vegetation type.

Montane Meadow

Small patches of meadow transitioning into upland grassland occur along the lakeshore south of Highway 38. The extent of the meadows could not be determined or mapped in 2002 due to dry conditions. Meadows in the Big Bear Valley may be perennially saturated (i.e., wet meadows) or may have seasonally saturated soils during wet years (i.e., vernal meadows). This vegetation type is generally dominated by sedges (*Carex* spp.), rushes (*Juncus* spp.), and grasses (*Poa* spp., *Elymus* spp.). Dry meadows and the margins of wet meadows may also support big sagebrush (*Artemisia tridentata*) and timberline sagebrush (*Artemisia rothrockii*).

Meadow habitat in the San Bernardino Mountains is not officially recognized as a special status vegetation type by the CDFG but it is known to support several locally endemic plants [e.g., bird's foot checkerbloom (*Sidalcea pedata*), San Bernardino bluegrass (*Poa atropurpurea*), and California dandelion (*Taraxacum californicum*)] and is therefore considered to be of local concern.

Additionally, the San Bernardino National Forest recognizes montane meadow habitat as a rare ecological community of concern.

3.3.3 Special Status Plants

Eighty-one special status plant species are known to occur in the project region, 50 of which occur or have the potential to occur on the project site. A brief description of the special status plant species that were determined to have potential to occur on the project site are listed below alphabetically according to their scientific name. This information is also summarized in Table 2.

Coville's Dwarf Abronia (*Abronia nana* ssp. *covillei*)

Coville's dwarf abronia is a CNPS List 4 species that typically blooms from May to August. This perennial herb occurs in carbonate, sandy soils in Joshua tree woodland, pinyon-juniper woodland, subalpine coniferous forest, and upper montane coniferous forest between 5,200 and 9,200 feet above msl. This species occurs in the Inyo, Mono, and San Bernardino counties. The project site provides marginally suitable habitat for this species and the potential for occurrence is considered to be low.

Parish's Onion (*Allium parishii*)

Parish's onion is a CNPS List 4 species that typically blooms from April to May. This perennial, bulbiferous herb occurs in rocky soils of Joshua tree woodland, Mojavean desert scrub, and pinyon-juniper woodland between 3,000 and 6,000 feet above msl. This species occurs in the Imperial, Riverside, and San Bernardino counties. The project site provides suitable habitat for this species but is above the known elevation range for this species and the potential for occurrence is considered to be low.

Parish's Rock-Cress (*Arabis parishii*)

Parish's rock cress is a CNPS List 1B species that typically blooms from April to May. This perennial herb occurs in rocky, quartzite and clay, or sometimes carbonate soils in pebble plains, pinyon-juniper woodlands, and upper montane coniferous forests from approximately 3,900 to 8,000 feet above msl. It is endemic to the San Bernardino Mountains. This species was observed uncommonly in scattered patches throughout pebble plain and open Jeffrey pine forest on the project site during botanical surveys conducted in 2002.

Rock Sandwort (*Arenaria lanuginosa* ssp. *Saxosa*)

Rock sandwort is a CNPS List 2 species that typically blooms from July to August. This perennial herb occurs in mesic, sandy soils of subalpine, coniferous forests, and upper montane coniferous forests from approximately 5,900 to 9,000 feet above msl. It is found only in the San Bernardino

Mountains in the state of California but also occcurs in Arizona, Baja California, and elsewhere. The project site provides marginally suitable habitat for this species and the potential for occurrence is considered to be moderate.

Big Bear Valley Sandwort (*Arenaria ursina*)

Big Bear Valley sandwort is a federally-listed Threatened and CNPS List 1B species that typically blooms from May to August. This perennial herb occurs in mesic, rocky soils of pebble plain, and pinyon-juniper woodland from approximately 6,400 to 6,900 feet above msl. This species is endemic to the San Bernardino Mountains. The project site provides suitable habitat for this species and the potential for occurrence is considered to be high.

Crested Milk-Vetch (*Astragalus bicristatus*)

Crested milk-vetch is a CNPS List 4 species that typically blooms from May to August. This perennial herb occurs in sandy or rocky soils of lower and upper montane coniferous forests from approximately 5,500 to 8,200 feet above msl. This species is found in the San Bernardino, San Gabriel, and San Jacinto mountains. The project site provides suitable habitat for this species and the potential for occurrence is considered to be high.

Big Bear Valley Milk-Vetch (*Astragalus lentiginosus* var. *Sierrae*)

Big Bear Valley milk-vetch is a CNPS List 1B species that typically blooms from April to August. This perennial herb occurs in gravelly or rocky soils of desert scrub, meadows and seeps, pinyon-juniper woodland, and upper montane coniferous forest from approximately 5,800 to 8,500 feet above msl. It is found in the San Bernardino, San Gabriel, San Jacinto, and Santa Rosa mountains. The project site provides suitable habitat for this species and the potential for occurrence is considered to be high.

Big Bear Valley Woollypod (*Astragalus leucolobus*)

Big Bear Valley woollypod is a CNPS List 1B species that typically blooms from May to July. This perennial herb occurs in rocky soils of lower montane coniferous forest, pebble plain, pinyon-juniper woodland, and upper montane coniferous forests from approximately 5,600 to 8,000 feet above msl. It is found in the San Bernardino, San Gabriel, San Jacinto, and Santa Rosa mountains. This species was observed throughout the project site during botanical surveys conducted in 2002.

Palmer's Mariposa Lily (*Calochortus palmeri* var. *palmeri*)

Palmer's mariposa lily is a CNPS List 1B species that typically blooms between May and July. This perennial, bulbiferous herb occurs in mesic chaparral, lower montane coniferous forest, meadows, and seeps from approximately 3,200 to 7,200 feet above msl. It is a California endemic found in the

South Coast and Transverse ranges in Kern, Los Angeles, Riverside, Santa Barbara, San Bernardino, San Luis Obispo, and Ventura counties. This species was not observed during the 2002 botanical surveys. However, it has a moderate potential to occur on the project site given the availability of marginally suitable habitat in mesic portions of Jeffrey pine forest.

Ash-Gray Indian Paintbrush (*Castilleja cinerea*)

Ash-gray Indian paintbrush is a federally-listed Threatened and CNPS List 1B species. It is a root parasite on other plants, often parasitizing the federally-listed Threatened southern mountain buckwheat and Wright's matting buckwheat. It is a perennial herb, and typically blooms between May and August. It occurs in pebble plains, meadows, seeps, and open pinyon or Jeffrey pine forest from approximately 5,900 to 9,300 feet above msl and is endemic to the eastern San Bernardino Mountains (Big Bear Valley, Holcolmb Valley, Onyx Summit, Snow Valley, and Sugarloaf Ridge). This species was reported and mapped on the project site by Michael Brandman Associates (MBA) (MBA 2000) and the California Natural Diversity Data Base (CDFG 2001). Botanical surveys in 2002 identified populations of this species throughout approximately 11.8 acres of pebble plain and open Jeffrey pine forest in the western half of the project site where it appears to be parasitizing Wright's matting buckwheat (see Exhibit 3). Populations of this species were found to be more widespread than reported previously and would be expected to occur in higher concentrations within the mapped Wright's matting buckwheat areas during normal rainfall years.

San Bernardino Mountain Owl's Clover (*Castilleja applegateii* ssp. *martinii*)

San Bernardino Mountain owl's clover is a CNPS List 1B species that typically blooms between June and August. This hemiparasitic, annual herb occurs in mesic chaparral, meadows and seeps, pebble plain, and upper montane coniferous forests from approximately 4,200 to 7,850 feet above msl. It is a California endemic found in Riverside and San Bernardino counties. This species was not observed during the 2002 botanical surveys. However, it has a high potential to occur on the project site given the availability of suitable habitat throughout the project site, especially within pebble plains and open Jeffrey pine forest where Wright's matting buckwheat occurs.

Male Fern (*Dryopteris filix-mas*)

Male fern is a CNPS List 2 species that is typically fertile from July to September. This rhizomatous, perennial herb occurs in granitc, rocky soils of upper montane coniferous forests from approximately 7,800 to 10,200 feet above msl. This species is known from only two locations in the White Mountains and Holcomb Valley in Inyo and San Bernardino counties respectively. The project site provides suitable habitat; however, the project site is outside the known range of this local rarity and the potential for occurrence is considered to be low.

San Bernardino Mountains Dudleya (*Dudleya abramsii* ssp. *affinis*)

The San Bernardino Mountains dudleya is a CNPS List 1B species that typically blooms from April to June. This perennial herb occurs in granitic, quartzite, or carbonate soils of pebble plain, pinyon-juniper woodland, and upper montane coniferous forest from approximately 5,800 to 8,500 feet above msl. This species is endemic to the San Bernardino Mountains. The project site provides marginally suitable habitat for this species and the potential for occurrence is considered to be moderate.

Leafy Buckwheat (*Eriogonum foliosum*)

Leafy buckwheat is a CNPS List 1B species that typically blooms from July to October. This annual herb occurs in sandy soils of chaparral, lower montane coniferous forest, and pinyon-juniper woodland from approximately 3,900 to 7,200 feet above msl. This species is found in scattered locations from Big Bear Valley south to Baja California. The project site provides suitable habitat for this species and the potential for occurrence is considered to be high.

Southern Mountain Buckwheat (*Eriogonum kennedyi* var. *austromontanum*)

Southern mountain buckwheat is a federally-listed Threatened and CNPS List 1B species that typically blooms between June and August. It is a mat-forming, woody perennial endemic to pebble plain habitats in Big Bear and Holcomb valleys in the San Bernardino Mountains from approximately 5,800 to 7,500 feet above msl. This species often serves as a host plant for the hemi-parasitic ash-gray Indian paintbrush and is also a food plant for the recently described, locally-endemic San Bernardino blue butterfly (*Euphilotes bernardino bernardino*). It is very similar to the more common Wright's matting buckwheat which is common on the project site. Southern mountain buckwheat was not seen during the 2002 botanical surveys and it has not been reported on the project site by other botanists (MBA 2000; CDFG 2001). However, it is considered to have a low potential to occur given that suitable habitat occurs within pebble plains on the project site.

Southern Sierra Woolly Sunflower (*Eriophyllum lanatum* var. *obovatum*)

Southern Sierra woolly sunflower is a CNPS List 4 species that typically blooms from June to July. This perennial herb occurs in lower and upper montane coniferous forest from approximately 4,200 to 8,100 feet above msl. This species is found in the southern Sierra Nevada and western San Bernardino mountains. The project site provides suitable habitat for this species; however, the project site is on the margin of this species geographic range and the potential for occurrence is considered to be low.

Jepson's Bedstraw (*Galium jepsonii*)

Jepson's bedstraw is a CNPS List 4 species that typically blooms from July to August. This rhizomatous, perennial herb occurs in granitic, rocky or gravelly soils in lower and upper montane coniferous forests from approximately 6,500 to 8,100 feet above msl. This species is found in the San Gabriel and San Bernardino mountains. The project site provides suitable habitat for this species and the potential for occurrence is considered to be high.

Johnston's Bedstraw (*Galium johnstonii*)

Johnston's bedstraw is a CNPS List 4 species that typically blooms from June to July. This perennial herb occurs in chaparral, lower montane coniferous forest, pinyon-juniper woodland, and riparian woodland from approximately 5,300 to 7,500 feet above msl. This species is found in the San Gabriel and San Bernardino mountains. The project site provides suitable habitat for this species and the potential for occurrence is considered to be high.

San Bernardino Mountains Gilia (*Gilia leptantha* ssp. *leptantha*)

San Bernardino Mountains gilia is a List 1B species that typically blooms from June to August. This annual herb occurs in sandy or gravelly soils of lower montane coniferous forests from approximately 5,000 to 7,700 feet above msl. This species is endemic to the upper Santa Ana River watershed in the San Bernardino Mountains. The project site provides suitable habitat for this species; however, it has not been recorded in the Big Bear valley and the potential for occurrence is considered to be low.

Shaggy-Haired Alumroot (*Heuchera hirsutissima*)

Shaggy-haired alumroot is a CNPS List 1B species that typically blooms from May to July. This rhizomatous, perennial herb occurs in rocky soils of subalpine coniferous forest, and upper montane coniferous forest above approximately 7,200 feet above msl. This species is endemic to the San Jacinto and Santa Rosa mountains with one uncomfirmed record for the San Bernardino Mountains. The project site provides limited suitable habitat for this species and the potential for occurrence is considered to be low.

Parish's Alumroot (*Heuchera parishii*)

Parish's alumroot is a CNPS List 1B species that typically blooms from June to July. It is a rhizomatous perennial herb that occurs in rocky soils of alpine boulder and rock fields, lower montane coniferous forest, subalpine coniferous forest, and upper montane coniferous forest above approximately 4,800 feet above msl. This species is endemic to the San Bernardino Mountains. The project site provides limited suitable habitat for this species and the potential for occurrence is considered to be low.

Silver-Haired Ivesia (*Ivesia argyrocoma*)

Silver-haired ivesia is a CNPS List 1B species that typically blooms between June and August. This perennial herb occurs in alkaline meadows and seeps, pebble plains, and upper montane coniferous forest from approximately 4,900 to 8,800 feet above msl. It occurs in the San Bernardino Mountains and a disjunct population occurs in the mountains of Baja California. This species was reported on the project site by MBA (MBA 2000) and was observed throughout mapped pebble plain habitat on the project site during the 2002 botanical surveys.

Duran's Rush (*Juncus duranii*)

Duran's rush is a CNPS List 4 species that typically blooms from July to August. It is a rhizomatous, perennial herb that occurs in mexic soils of lower montane coniferous forest, meadows and seeps, and upper montane coniferous forest from approximately 5,800 feet to 9,000 feet above msl. This species is found in the San Bernardino, San Gabriel, and San Jacinto mountains. The project site provides suitable habitat for this species and the potential for occurrence is considered to be high.

Short-Sepaled Lewisia (*Lewisia brachycalyx*)

Short-sepaled lewisia is a CNPS List 2 species that typically blooms from May to June. It is a perennial herb that occurs in mesic meadows and seeps, and lower montane coniferous forest from 4,500 to 7,500 feet above msl. This species is endemic to the San Bernardino Mountains. The project site provides limited suitable habitat for this species and the potential for occurrence is considered to be moderate.

Lemon Lily (*Lilium parryi*)

Lemon lily is CNPS List 1B species that typically blooms from July to August. It is a bulbiferous, perennial herb that occurs in lower and upper montane coniferous forests, meadows and seeps, and riparian scrub above approximately 4,000 feet above msl. This species is found in the mountain ranges of southern California and southeastern Arizona. The project site provides marginally suitable habitat for this species and the potential for occurrence is considered to be low.

Baldwin Lake Linanthus (*Linanthus killipii*)

The Baldwin Lake linanthus is a CNPS List 1B species that blooms from May to July. It is an annual herb that occurs in alkaline meadows and seeps, pebble plain, pinyon-juniper woodland, and upper montane coniferous forest from approximately 5,500 to 7,800 feet above msl. This species is endemic to the San Bernardino Mountains. The project site provides suitable habitat for this species and the potential for occurrence is considered to be high.

San Bernardino Mountain Monkeyflower (*Mimulus exiguus*)

The San Bernardino Mountain monkeyflower is a CNPS List 1B species that typically blooms from June to July. It is an annual herb that occurs in mesic, clay soils of meadows and seeps, pebble plain, and upper montane coniferous forest between approximately 5,800 and 7,500 feet above msl. This species is found in the San Bernardino Mountains and high mountains of Baja California. The project site provides suitable habitat for this species and the potential for occurrence is considered to be high.

Purple Monkeyflower (*Mimulus purpureus* var. *purpureus*)

Purple monkeyflower is a CNPS List 2 species that typically blooms from May to July. It is an annual herb that occurs in meadows and seeps, pebble plain, and upper montane coniferous forest from approximately 6,100 to 7,500 feet above msl. This species is found in the San Bernardino Mountains and high mountains of Baja California. The project site provides suitable habitat for this species and the potential for occurrence is considered to be high.

Baja Navarretia (*Navarretia peninsularis*)

Baja navarretia is a CNPS List 1B species that blooms from July to September. It is an annual herb that occurs in mesic, sandy soils in chaparral and lower montane coniferous forests between approximately 4,800 and 7,500 feet above msl. This species is found in the mountains of central and southern California and north Baja California. The project site provides limited suitable habitat for this species and the potential for occurrence is considered to be low.

Chickweed Oxytheca (*Oxytheca caryophylloides*)

Chickweed oxytheca is a CNPS List 4 species that typically blooms from July to September. It is an annual herb that occurs in sandy soils of lower montane coniferous forest from approximately 3,900 to 8,500 feet above msl. This species is found in the southern Sierra Nevada, Transverse Ranges, and San Jacinto Mountains. The project site provides suitable habitat for this species and the potential for occurrence is considered to be high.

Cienega Seca Oxytheca (*Oxytheca parishii* var. *cienegensis*)

The cienega seca oxytheca is a CNPS List 1B species that typically blooms from June to September. It is an annual herb that occurs in sandy, granitic soils in upper montane coniferous forest from approximately 7,000 to 8,000 feet above msl. This species is found along Coon Creek and Cienega Seca Creek in San Bernardino County. The project site provides suitable habitat for this species; however, the project site is well outside the known geographic range for this species and the potential for occurrence is considered to be low.

Parish's Yampah (*Perideridia parishii* ssp. *parishii*)

Parish's yampah is a CNPS List 2 species that typically blooms from June to August. It is a perennial herb that occurs in lower and upper montane coniferous forests, and meadows and seeps above approximately 6,500 feet above msl. This species is found in the San Bernardino Mountains and in disjunct populations in Arizona and New Mexico. The project site provides suitable habitat for this species and the potential to occur is considered to be high.

Transverse Range Phacelia (*Phacelia exilis*)

The Transverse Range phacelia is a CNPS List 4 species that typically blooms from May to August. It is an annual herb that occurs in sandy or gravelly soils in lower and upper montane coniferous forests, and meadows and seeps from approximately 3,500 to 8,500 feet above msl. This species is found in the southern Sierra Nevada and Transverse Ranges. The project site provides suitable habitat for this species and the potential to occur is considered to be high.

Mojave Phacelia (*Phacelia mohavensis*)

The Mojave phacelia is a CNPS List 4 species that typically blooms from April to August. It is an annual herb that occurs in sandy or gravelly soils of cismontane woodland, lower montane coniferous forest, meadows and seeps, and pinyon-juniper woodland from approximately 4,500 to 8,100 feet above msl. This species is found in the San Gabriel and San Bernardino mountains. The project site provides suitable habitat for this species and the potential to occur is considered to be high.

Bear Valley Phlox (*Phlox dolichantha*)

The Bear Valley phlox is a CNPS List 1B species that blooms from June to July. It is a perennial herb that occurs in pebble plain, and upper montane coniferous forest from approximately 6,500 to 8,800 feet above msl. This species is endemic to the San Bernardino Mountains. The project site provides suitable habitat for this species and the potential to occur is considered to be high.

San Bernardino Bluegrass (*Poa atropurpurea*)

San Bernardino bluegrass is a federally-listed Endangered and CNPS List 1B species that typically blooms from May to June. It is a rhizomatous, perennial herb that occurs in mesic meadows and seeps between approximately 4,800 and 7,200 feet above msl. This species is found in the San Bernardino and Laguna mountains (San Diego). The project site provides suitable habitat for this species and the potential to occur is considered to be high.

Bear Valley Pyrrocoma (*Pyrrocoma uniflora* ssp. *gosssypina*)

Bear Valley pyrrocoma is a CNPS List 1B species that typically blooms from July to August. It is a perennial herb that occurs in meadows and seeps, and pebble plain from approximately 5,200 to 7,600 feet above msl. This species is endemic to the San Bernardino Mountains. The project site provides suitable habitat for this species and the potential to occur is considered to be high.

Parish's Rupertia (*Rupertia rigida*)

Parish's rupertia is a CNPS List 4 species that typically blooms from June to July. It is a perennial herb that occurs in chaparral, cismontane woodland, and lower montane coniferous forest below approximately 8,100 feet above msl. This species is found in the San Bernardino Mountains, Peninsular Ranges, and Baja California. The project site provides suitable habitat for this species and the potential to occur is considered to be high.

Bluish Spike-Moss (*Selaginella asprella*)

Bluish spike-moss is a CNPS List 4 species that typically blooms in July. It is a rhizomatous, perennial herb that occurs in granitic, rocky soils of cismontane woodland, lower and upper montane coniferous forests, pinyon-juniper woodland, and subalpine coniferous forest between approximately 5,200 to 8,800 feet above msl. This species occurs throughout southern California mountain ranges and Baja California. The project site provides limited suitable habitat for this species and the potential for occurrence is considered to be low.

San Bernardino Butterweed (*Senecio bernardinus*)

San Bernardino butterweed is a CNPS List 1B species that typically blooms from May to July. It is a perennial herb that occurs in meadows and seeps, pebble plain, and upper montane coniferous forest between approximately 5,800 to 7,500 feet above msl. This species is endemic to the San Bernardino Mountains and is known from fewer than twenty occurrences. The project site provides limited suitable habitat for this species and the potential for occurrence is considered to be low.

Parish's Checkerbloom (*Sidalcea hickmanii* ssp. *parishii*)

Parish's checkerbloom is a federal Candidate for listing as Threatened or Endangered, state Rare, and CNPS List 1B species that typically blooms from June to July. It is a perennial herb that occurs in chaparral, cismontane woodland, and lower montane coniferous forest between 3,200 and 8,200 feet above msl. This species is found mainly in the San Bernardino Mountains and in a few localities in the Santa Ynez Mountains. The project site provides limited suitable habitat for this species and potential for occurrence is considered to be low.

Bird's Foot Checkerbloom (*Sidalcea pedata*)

Bird's foot checkerbloom is a federally- and state-listed Endangered and CNPS 1B species that typically blooms from May to July. It is a perennial herb that occurs in meadows and seeps, and pebble plain between approximately 5,200 and 8,100 feet above msl. This species is endemic to the San Bernardino Mountains. The project site provides marginally suitable habitat for this species and the potential to occur is considered to be low to moderate.

Prairie Wedge Grass (*Sphenopholis obtusata*)

Prairie wedge grass is a CNPS List 2 species that typically blooms from April to July. It is a perennial herb that occurs in mesic soils of cismontane woodland, meadows and seeps between approximately 1,000 and 6,550 feet above msl. This species is found in a few widely scattered locations in Amador, Fresno, Inyo, Mono, Riverside, and San Bernardino counties in California. The project site provides suitable habitat for this species and the potential to occur is considered to be high.

Laguna Mountains Jewelflower (*Streptanthus bernardinus*)

The Laguna Mountains jewelflower is a CNPS List 4 species that typically blooms from June to July. It is a perennial herb that occurs in chaparral, and lower montane coniferous forest between approximately 3,900 and 8,100 feet above msl. This species is found in the Transverse and Peninsular ranges and Baja California. The project site provides suitable habitat for this species and the potential to occur is considered to be high.

Southern Jewelflower (*Streptanthus campestris*)

The southern jewelflower is CNPS List 1B species that typically blooms from May to July. It is a perennial herb that occurs in rocky soils of chaparral, lower montane coniferous forest, and pinyon-juniper woodland from approximately 2,900 to 7,500 feet above msl. This species is known from fewer than twenty occurrences in Riverside, San Bernardino, and San Diego counties, and Baja California. The project site provides suitable habitat for this species and the potential to occur is considered to be high.

Pine Green-Gentian (*Swertia neglecta*)

Pine green-gentian is a CNPS List 4 species that typically blooms from May to July. It is a perennial herb that occurs in lower and upper montane coniferous forests, and pinyon-juniper woodlands from approximately 4,500 to 8,100 feet above msl. This species is found in the South Coastal and Transverse ranges within Los Angeles, San Bernardino, and Ventura counties. The project site provides suitable habitat for this species and the potential to occur is considered to be high.

California Dandelion (*Taraxacum californicum*)

The California dandelion is a federally-listed Endangered and CNPS List 1B species that typically blooms from May to July. It is a perennial herb that occurs in mesic meadows and seeps from approximately 6,300 to 7,800 feet above msl. This species is endemic to the San Bernardino Mountains. The project site provides suitable habitat for this species and the potential to occur is considered to be low to moderate.

Slender-Petaled Thelypodium (*Thelypodium stenopetalum*)

Slender-petaled thelypodium is a federally- and state-listed Endangered and CNPS List 1B species that typically blooms from June to July. It is a perennial herb that occurs in mesic, alkaline meadows and seeps from approximately 6,200 to 7,200 feet above msl. This species is endemic to the San Bernardino Mountains with less than eight known populations in the Big Bear and Holcomb valleys. The project site contains marginally suitable habitat for this species and the potential to occur is considered to be low.

Small-Flowered Bluecurls (*Trichostema micranthum*)

Small-flowered bluecurls is a CNPS List 4 species that typically blooms from July to September. It is an annual herb that occurs mesic soils in lower montane coniferous forest, and meadows and seeps from 6,500 to 7,500 feet above msl. This species is found in the San Bernardino Mountains and Baja California. The project site provides suitable habitat for this species and the potential to occur is considered to be high.

Grey-Leaved Violet (*Viola pinetorum* ssp. *grisea*)

Grey-leaved violet is a CNPS List 1B species that typically blooms in April. It is a perennial herb that occurs in meadows and seeps, subalpine coniferous forest, and upper montane coniferous forest from approximately 4,800 to 11,100 feet above msl. This species is known from ten occurrences in Fresno, Kern, San Bernardino, and Tulare counties. There is disagreement about the range of this species. The project site provides suitable habitat for this species; however, the project site is outside the known geographic range for this species and the potential to occur is considered to be low.

3.3.4 Special Status Wildlife

Fifty-three special status wildlife species are known to occur within the region, 39 of which have the potential to occur within the project site. Focused surveys for the bald eagle, California spotted owl, southwestern willow flycatcher, and southern rubber boa were conducted in the winter, spring, summer, and fall of 2002 (Appendices B-E). A brief description of the special status wildlife species that were determined to have potential to occur on the project site are listed below. Wildlife species

are grouped by type and listed alphabetically according to their scientific name. These species are summarized in Table 3.

Invertebrates

Andrew's Marble Butterfly (*Euchloe hyantis* ssp. *andrewsi*)

Andrew's marble butterfly is a federal Species of Concern. This species is found at elevations above 5,000 feet above msl near Lake Arrowhead and Big Bear Lake, and in other locations across the San Bernardino Mountains crest and north slopes. It is found primarily in pine and mixed conifer forests (Murphy 1990). The larval host plants for this subspecies are the Laguna Mountains jewelflower and *Arabis holboellii*. The project site provides limited suitable habitat for this species; however, the project site is above the known elevation range. The potential for this butterfly species to occur is considered to be low.

Amphibians

Yellow-Blotched Salamander (*Ensatina escholtziii croceater*)

The yellow-blotched salamander is a federal Species of Concern and state Species of Special Concern. This species is found at elevations up to 8,000 feet above msl among rotting logs and leaf litter in mixed stands of oaks and conifers. The project site provides limited, marginally suitable habitat and the potential for it to occur is considered to be low.

Reptiles

Silvery Legless Lizard (*Anniella pulchra pulchra*)

The silvery legless lizard is a federal Species of Concern and a state Species of Special Concern. The silvery legless lizard inhabits areas with moist sandy soil, including dry washes, woodlands, riparian, and scrub communities at elevations ranging from sea level to about 5,000 feet above msl (Stebbins 1985). The project site provides a limited amount of potentially suitable habitat for this species; however, the project site is above the known elevation range for this species and its potential to occur is considered to be low.

Southern Rubber Boa (*Charina bottae umbbricata*)

The southern rubber boa is a federal Species of Concern and state-listed Threatened species found in the San Bernardino and San Jacinto mountains at elevations between 4,900 and 7,900 feet above msl. The majority of the localities for this species are in a 10-mile long strip between Twin Peaks in the west to Green Valley in the east of the San Bernardino Mountains (Stewart 1988). Known locations for this species occur on the north-facing slopes immediately south of Big Bear

Lake. This species usually occurs in moist woodlands and coniferous forests with deep, well developed soils (Loe 1985). It is a burrower and also commonly makes use of rock out crops for hibernation. Large downed logs and a well-developed litter layer are considered important for cover and for maintaining soil moisture. Surveys for this species were conducted in the spring and summer of 2002 by BonTerra Consulting. The final survey report is presented in Appendix B. No southern rubber boas were encountered during surveys. Given the lack of historical records in the immediate vicinity of the project site, and the negative results of two independent focused survey techniques, the southern rubber boa is not expected to occur on the project site.

Coastal Western Whiptail (*Cnemidophorus tigris multiscutatus*)

The coastal western whiptail is a federal Species of Concern. It is a moderately large, slender lizard typically found in open scrub, chaparral, and woodland communities in semi-arid areas or where vegetation is sparse, from below sea level to 7,000 feet above msl (Stebbins 1985). This species is restricted to the western coast of North America from Ventura County south through the northern two-thirds of the Baja California peninsula. The project site provides suitable habitat for this species; however, it is at the maximum elevation for this species and its potential to occur is considered to be moderate.

San Bernardino Ringneck Snake *(Diadophis punctatus modestus*)

The San Bernardino ringneck snake is a federal Species of Concern and is considered locally rare in southwestern California. It inhabits scrub, chaparral, native grassland, and woodland communities. This species is difficult to detect due to its secretive behavior. It occurs in elevations from sea level to 7,000 feet above msl (Stebbins 1985). The project site provides limited suitable habitat for this species and its potential to occur is considered to be low.

San Bernardino Mountain Kingsnake (*Lampropeltis zonata parvirubra*)

The San Bernardino mountain kingsnake is a federal Species of Concern that occurs in the San Jacinto, San Bernardino, and San Gabriel mountains. This species typically occurs in open stands of ponderosa pine, Jeffrey pine, Coulter pine, and/or black oak at elevations ranging from 4,500 to 6,500 feet above msl. This species occurs at higher elevations, but is less common. Partially shaded rock outcrops appear to be an important microhabitat element for refugia and basking sites (McGurty 1988). The project site provides marginally suitable habitat for this species and its potential to occur is considered to be moderate.

Southern Sagebrush Lizard (*Sceloporus graciosus vandenbergianus*)

The southern sagebrush lizard is a federal Species of Concern that occurs in open coniferous forests and shrubland above 3,000 feet above msl. Its known range extends from Mount Pinos south to Baja California. This species inhabits mixed conifer forest, black oak woodlands, montane

chaparral, and pinyon-juniper woodlands (Zeiner et al. 1988). This species was observed frequently on the project site.

Birds

Cooper's Hawk (*Accipiter cooperii*)

The Cooper's hawk is a state Species of Special Concern. Both resident and migratory populations exist in San Bernardino County. Wintering Cooper's hawks are often seen in wooded urban areas and native woodland communities. Preferred nesting habitats include riparian forests, mountain canyons, and oak woodlands. Cooper's hawks in the region prey on small birds and rodents that live in woodland and, occasionally, scrub and chaparral communities. Breeding residents have been observed in the vicinity of Big Bear Lake. The project site provides suitable foraging habitat, but a limited amount of nesting habitat for this raptor. Therefore, its overall potential to occur is considered to be high, although the potential for nesting is moderate.

Northern Goshawk (*Accipiter gentilis*)

The northern goshawk is a federal Species of Concern and state Species of Special Concern. Rare in southern California, goshawks have been observed during the breeding season only on Mount Abel, Mount Pinos, and in the San Bernardino and San Jacinto mountains (Garrettt and Dunn 1981). Breeding has not been documented in the San Bernardino Mountains, although goshawks have been observed near Big Bear Lake (Garrett and Dunn 1981). Goshawks occur in a variety of coniferous forest communities, including ponderosa and Jeffrey pine, mixed conifer, white fire and lodgepole pine. Large snags and downed logs are believed to be important habitat elements because they increase the abundance of small- to medium sized birds and mammals composing this species prey base (Reynolds et al. 1992). Limited suitable foraging habitat is present on the project site and the potential for this species is considered moderate for foraging, but no potential for nesting.

Sharp-shinned Hawk (*Accipiter striatus*)

The sharp-shinned hawk is a state Species of Special Concern. This raptor is a fairly common winter visitor throughout southern California (Garrett and Dunn 1981). It prefers woodland communities, but can also be found in virtually any habitat as it passes through the area during migration. The sharp-shinned hawk is a fairly common winter visitor in the Big Bear Lake vicinity, and its potential to occur for foraging is considered to be high. However, the project site provides no nesting habitat for this raptor.

Golden Eagle (*Aquila chryysaetos*)

The golden eagle is a state Species of Special Concern. This raptor is uncommon, but widely distributed throughout foothill, lower montane, and desert montane habitats in southern California. Golden eagles nest primarily on cliffs and hunt for rabbits and other small mammals in open habitats succh as grasslands, oak savannas, and open shrublands. No nesting habitat is present on the project site; however, the potential for foraging on the project site is considered high.

Long-eared Owl (*Asio otus)*

The long-eared owl is a state Species of Special Concern. It breeds and roosts in riparian forests and woodlands or other dense forest habitats. This owl forages at night in open habitats including marshes, grasslands, and agricultural fields. It occurs throughout North America but is an increasingly rare breeder in southern California. The project site provides moderate suitable foraging habitat and limited nesting habitat, for this species.

Ferruginous Hawk (*Buteo regalis*)

The ferruginous hawk is a federal Species of Concern and a state Species of Special Concern. Ferruginous hawks occur from mid-fall through early spring in coastal southern California. They forage over grasslands and the ecotone between scrub and grasslands. The project site provides a limited amount of suitable foraging habitat, but no nesting habitat, for this species. Therefore, its potential to occur on the project site is considered to be low for foraging, with no potential for nesting.

Northern Harrier (*Circus cyaneus*)

The northern harrier is a state Species of Special Concern. It is a regular winter migrant that occasionally breeds along the coast of southern California. Foraging habitat consists of marsh, grassland, and scrub habitats. The project site provides limited suitable foraging habitat, but no nesting habitat, for this raptor. Therefore, its potential to forage on the project site is considered to be low.

Black Swift (*Cypseloides niger*)

The black swift is a state Species of Special Concern. It is known to breed in the San Gabriel Mountains, Mill Creek Canyon in the San Bernardino Mountains, and the San Jacinto Mountains. This species occurs in mountain and foothill canyons where it nests in rocky cliffs behind waterfalls. No suitable nesting habitat is present on the project site; however, this project site could provide suitable foraging habitat and the potential for this species to forage on the project site is considered moderate.

Yellow Warbler (*Dendroica petechia*)

The western yellow-warbler is a California Species of Special Concern. This subspecies of yellow warbler that breeds in southern California is the western yellow warbler (*D.p. brewsteri*) (Dunn and Garrett 1997). This subspecies occurs in coastal areas from northwestern Washington south to western Baja California (Dunn and Garrett 1997). In southern California, yellow warblers breed locally in riparian woodlands. The yellow warbler is an abundant migrant and would be expected to occur in spring and fall during migration. No suitable nesting habitat is present on the project site; however, the potential for foraging migrants on the project site is considered moderate.

White-Tailed Kite (*Elanus leucereus*)

The white-tailed kite is a California Fully Protected species. This raptor typically nests in oaks, willows, and sycamores, and forages within adjacent grassland and scrub habitats. White-tailed kites show strong site fidelity to nest groves and trees. The most abundant prey species for this raptor includes the California vole, western harvest mouse, and house mouse. The project site provides limited suitable foraging and nesting habitat for this raptor. Therefore, its potential to occur on the project site is considered to be low for nesting and foraging.

Southwestern Willow Flycatcher (*Empidonax traillii extimus*)

The southwestern willow flycatcher is a federally- and state-listed Endangered species. This subspecies has declined drastically due to a loss of breeding habitat and nest parasitism by brown-headed cowbirds. This species occurs in riparian habitats along rivers, streams, or other wetlands where dense growths of willows (*Salix* sp.), baccharis (*Baccharis* sp.), arrowweed (*Pluchea* sp.), tamarisk (*Tamarix* sp.), or other plants are present, often with a scattered overstory of cottonwood (*Populus* sp.) (USFWS February 27, 1995). The potential for this species to occur on the project site as a foraging migrant is considered to be high, but its potential to nest on the project site is considered low. Surveys for this species were conducted in the spring and summer of 2002 by BonTerra Consulting. No breeding or individual southwestern willow flycatchers were detected during the surveys. Willows along the shoreline are patchy and lack the dense growth or willow thicket favored by this species as territorial or breeding habitat. Therefore, breeding southwestern willow flycatchers are not expected to occur on the project site.

Merlin (*Falco columbaris*)

The merlin is a state Species of Special Concern. In California, the merlin prefers vast open space areas such as estuaries, grasslands, and deserts where it hunts small flocking birds such as sandpipers, larks, sparrows, and pipits. The merlin is a very rare winter visitor to the Big Bear Lake area. The project site provides suitable foraging habitat and perching locations, but no nesting habitat, for this raptor. Therefore, its potential to occur for foraging is considered to be low, and there is no potential for nesting.

Prairie Falcon (*Falco mexicanus*)

The prairie falcon is a state Species of Special Concern. It is now a rare visitor to the coastal plain of southern California. Foraging habitat for this species consists of open habitats such as deserts, grasslands, rangelands, and marshes. For nesting, this large falcon uses ledges of cliff faces. The project site provides suitable foraging habitat for this raptor, but no potentially suitable nesting habitat. Therefore, its potential to occur is considered to be low for foraging only.

American Peregrine Falcon (*Peregrinus anatum*)

The peregrine falcon is a state-listed Endangered species that, due to recent population gains, has been recently delisted as Endangered by the USFWS. No such delisting has been proposed by the state. Peregrine falcons prey almost exclusively on birds and use a variety of habitats, particularly wetlands and coastal areas, and nest on cliffs or building ledges. The project site provides limited suitable foraging habitat for the peregrine falcon, but no potentially suitable nesting habitat. Therefore, its potential to occur on the project site is considered to be low for foraging only.

Bald Eagle (*Haliaeetus leucocephalus*)

The bald eagle is a state- and federally-listed Endangered species. This raptor typically overwinters in small numbers in southern California near lakes and reservoirs where they feed on fish, coots, and waterfowl (Garrett and Dunn 1981). The largest known wintering population in southern California is at Big Bear Lake in the San Bernardino Mountains, where twenty to thirty eagles typically congregate from November to March. This species is known to be present on the project site in winter but is not expected to nest on the project site. Surveys and records searches were conducted on the project site in the winter of 2002 by BonTerra Consulting to determine bald eagle use of perch trees and favored roosting locations. The final survey report is presented in Appendix E. The surveys found that the site was used extensively by bald eagles. Bald eagle perch and roost locations were recorded and individual trees were marked with numbered tags. Tree locations are shown on Exhibit 3. The records search confirmed extensive use of the project site by bald eagles and found that the most commonly recorded use of a single tree was also on the project site.

Hepatic Tanager (*Piranga flava*)

The hepatic tanager is a state Species of Special Concern. In southern California, this species is known to breed only in the San Bernardino Mountains (Garrett and Dunn 1981). Breeding habitat consists of mature pinyon pine woodland with a mixture of taller conifers such as white fir or Jeffrey pine. Johnson and Garrett (1974) suggest this species may also occur in pine and deciduous oak woodlands on warm, arid slopes. The project site provides limited suitable foraging and nesting habitat for this species and potential for occurrence is considered to be low for foraging and nesting.

Purple Martin (*Progne subis*)

The purple martin is a state Species of Special Concern that historically occurred throughout all of the major mountain ranges in southern California. Many historic localities are no longer occupied and there are no known active localities in the San Bernardino Mountains (Garrett and Dunn 1981). This species is a secondary cavity nester of hardwood and conifer forests. The project site provides suitable habitat for this species; however, given the lack of records in the vicinity, the potential for occurrence is considered to be low for foraging and nesting.

California Spotted Owl (*Strix occidentalis occidentalis*)

The California spotted owl is a federal Species of Concern and state Species of Special Concern. This species occurs in all of the major mountain ranges in southern California, although some ranges support very few pairs. It is found at elevations ranging from below 1,000 feet to 8,500 feet above msl in mature forests typically with a dense, multi-layered canopy. Its prey base consists of woodrats (i.e., *Neotoma* spp.) and other rodents. Surveys were conducted for this species on the project site by BonTerra Consulting in the spring and summer of 2002. The final survey report is provided in Appendix D. Although one male spotted owl was detected approximately one mile to the northwest of the project site, no nesting pairs or individuals were observed on the project site. Therefore, no nesting pairs presently occur on the project site; however, individuals have a high potential to forage on the project site.

Gray Vireo (*Vireo vicinior*)

The gray vireo is a state Species of Special Concern. This species is a summer resident in a few highly localized areas on the coastal mountain ranges in southern California. It occurs on dry, desert-facing slopes in the San Gabriel, San Bernardino, and San Jacinto mountains (Garrett and Dunn 1981). This species prefers stands of dense, mature chaparral dominated by chamise or redshank or on brushy slopes in pinyon-juniper woodlands. The project provides limited, marginal habitat for this species. The potential for occurrence is considered to be low for foraging but there is no potential for breeding on the project site.

Mammals

Pallid Bat (*Antrozus pallidus*)

The pallid bat is a California Species of Special Concern that most commonly occurs in mixed oak and grassland habitats. This large bat roosts in rock crevices and in cavities of trees, especially oaks. The project site provides potentially suitable roosting and foraging habitat for this species and it has a low potential to occur.

Spotted Bat (*Euderma maculatum*)

The spotted bat is a federal Species of Concern and state Species of Special Concern. Little is known about its distribution. Spotted bats forage in a wide variety of habitats but roost strictly in cliffs. The project site would provide foraging habitat for this species and it has a moderate potential to occur for foraging; however, no suitable roosting habitat is present.

California Mastiff Bat (*Eumops perotis californicus*)

The California mastiff bat, the largest bat in the United States, is a federal Species of Concern and a California Species of Special Concern. This species is a very wide-ranging and high-flying insectivore that typically forages in open areas with high cliffs. It roosts in crevices in small colonies. The project site would provide limited foraging habitat for this species and it has a low potential to occur for foraging; however, no suitable roosting habitat is present.

San Bernardino Mountain Flying Squirrel (*Glaucomys sabrinus californicus*)

The San Bernardino Mountain flying squirrel is a federal Species of Concern and state Species of Special Concern. It occurs in the San Bernardino Mountains between 5,200 and 8,500 feet above msl. This species prefers mid- to upper-elevation, dense, mature coniferous forest habitats, particularly those containing white fir. They use cavities in large trees, snags, and logs for cover. The project site provides suitable foraging habitat for this species and the potential for occurrence is considered high; however, the potential for this species to breed on the project site is considered to be low as this species prefers to breed in relatively dense coniferous forests in proximity to riparian areas.

Small-footed Myotis (*Myotis ciliolabrum*)

The small-footed myotis is a federal Species of Concern that occurs throughout much of the western United States, occupying a variety of habitats. This species feeds among trees or over brush, and roosts in cavities of cliffs, trees, or rocks and within caves or mine shafts. The project site provide potentially suitable roosting and foraging habitat for this species and the potential for occurrence is considered to be low for roosting and high for foraging.

Long-eared Myotis (*Myotis evotis*)

The long-eared myotis is a federal Species of Concern that is restricted to high-elevation habitats. It is known to occur in Coon Creek in the San Bernardino National Forest. This species can occur in a variety of habitats, but are usually associated with coniferous forests where they roost under exfoliating tree bark. The project site provides potentially suitable roosting and foraging habitat for this species and the potential for occurrence is considered to be high for foraging and roosting.

Occult Little Brown Bat (*Myotis lucifugus*)

The occult little brown bat is a federal Species of Concern and state Species of Special Concern that is restricted to high-elevation habitats. This species occurs in pine forests at elevations ranging from 6,000 to 9,000 feet above msl. It roosts in buildings, trees, and cliffs and feeds over water or open sites. The project site provides suitable roosting and foraging habitat and the potential for this species to occur is considered to be high for foraging and roosting.

Fringed Myotis (*Myotis thysanodes*)

The fringed myotis is a federal Species of Concern that is restricted to high-elevation habitats. This species has been observed on Arrastre Creek on the San Bernardino National Forest (USDA 1999). It occurs in a wide variety of habitats but is most commonly found in dry pine or mixed conifer forests and pinyon-juniper woodlands where it will roost in caves, buildings, mine shafts, rock crevices in cliff faces, trees, and bridges. Hibernation has only been documented in buildings and mines (Miner and Brown 1996). The project site provides marginally suitable roosting and foraging habitat for this species and potential for occurrence is considered to be moderate for foraging and low for roosting.

Long-legged Myotis (*Myotis volans*)

The long-legged myotis is a federal Species of Concern that is restricted to high-elevation habitats. This species has been observed on Arrastre Creek on the San Bernardino National Forest (USDA 1999). It is primarily a bat of coniferous forests but also occurs seasonally in riparian and desert habitats. It uses abandoned buildings, cliff crevices, exfoliating tree bark, and hollows within snags as summer day roosts; caves and mine tunnels for hibernation. The project site provides marginally suitable foraging and roosting habitat for this species and its potential to occur on the project site is considered to be moderate for foraging and roosting.

Yuma Myotis (*Myotis yumanensis*)

The Yuma myotis is a federal Species of Concern and a relatively small bat that occurs statewide. This species is closely associated with water and wooded canyon bottoms throughout its range. Caves and old buildings are preferred roosting habitats, with roosts numbering up to 2,000 individuals. The project site provides potentially suitable foraging habitat for this species and the potential for this species to forage on the project site is considered to be moderate; however, this species is not expected to roost on the project site.

Pacific Western Big-eared Bat (*Plecotus townsendii pallescens*)

The Pacific western big-eared bat occurs throughout California and is a federal Species of Concern and state Species of Special Concern. In the southern portion of the state, the subspecies, *P. T.*

pallescens (Hall 1981), occupies a variety of communities, including oak woodlands, arid deserts, grasslands, and high-elevation forests and meadows. Known roosting sites in California include mines, caves, and buildings. The project site would provide foraging habitat for this species and it has a moderate potential to forage on the project site; however, no suitable roosting habitat is present.

3.3.5 Applicable Regional and Local Policies and Plans

San Bernardino Valley Multi-Species Habitat Conservation Plan

The draft Multi-Species Habitat Conservation Plan (MSHCP) encompasses approximately 500 square miles in the valley floor of the southwestern corner of San Bernardino County. The draft MSHCP area contains six unique habitat types, thirteen federally-listed Endangered or Threatened species, six state-listed Endangered or Threatened species, and fifty-three species of concern to federal and state agencies. San Bernardino County, through their Natural History Museum Staff, has been conducting biological and botanical surveys for the past several years in order to identify habitat needs and requirements for various sensitive species. The project site is not encompassed by the draft MSHCP and would not be subject to its policies and provisions.

County of San Bernardino General Plan

The County of San Bernardino general plan contains goals and policies/actions designed to preserve biological resources that apply to development within the County's jurisdiction. The general plan contains a list of Rare, Endangered and Threatened species that occur in San Bernardino County, adverse effects on which result in a mandatory finding of significant effect pursuant to State CEQA Guidelines, Section 15065 if individuals are adversely affected by County land use map changes and discretionary land use approvals, thereby requiring the preparation of an Environmental Impact Report (EIR). Listed plant species identified within the General Plan with potential to occur on the project site include Parish's checkerbloom and bird's foot checkerbloom. Listed wildlife species identified within the General Plan with potential to occur on the project site include the southern rubber boa and bald eagle. This biological technical report has been prepared as supporting documentation for the proposed Moon Camp project EIR which satisfies the requirements of the County of San Bernardino General Plan.

County of San Bernardino Biotic Resources Overlay District

The project site lies within a County of San Bernardino Biotic Resources (BR) Overlay District. The purpose of the BR Overlay District is to "implement General Plan policies regarding the protection and conservation of beneficial rare and endangered plants and animal resources and their habitats which have been identified within unincorporated areas of the county" (Article 2, 85.030201). The County General Plan implements the intent of the BR Overlay District by requiring all proposed land uses with a minimum of 25 percent of the total proposed development area within the BR Overlay

District to prepare a biological technical report identifying impacts to biological resources and mitigation measures designed to reduce or eliminate project related impacts. This biological technical report is intended to satisfy the requirements of the BR Overlay District.

Plant Protection and Management Ordinance – County of San Bernardino Municipal Code

The County of San Bernardino dictates under Chapter 8, Division 9 of the Municipal Code (Plant Protection and Management) that development on all private and public lands within the unincorporated areas of San Bernardino County is subject to specific requirements. Removal of any native plant from unincorporated areas of San Bernardino requires the approval of a removal permit. Additionally, the following sections of the ordinance would apply to native plants on the project site:

89.0110(a) The provisions of this Division shall not authorize the removal of perch trees within identified American Bald eagle habitat.

89.0115(c) The reviewing authority may require certification from an appropriate tree expert or native plant expert that such tree removals are appropriate, supportive of a healthy environment and are in compliance with the provisions of this chapter.

89.0205 Any coniferous tree or portion thereof, including stumps, shall be treated in accordance with one of the methods specified in Sections 89.0205 and 89.0210 within fifteen (15) days after such a tree or portion of such a tree has been cut.

Migratory Bird Treaty Act (MBTA)

The MBTA established in 1918 the federal prohibition, unless permitted by regulations, to pursue, hunt, take, capture, or kill any migratory bird species or any part, nest, or egg of any such migratory bird species covered by the act. Impacts to any bird (or its nest) listed by the MBTA are considered punishable by fines and/or imprisonment. Additionally, impacts to nesting MBTA-listed species is considered a significant impact by CEQA per guideline section .

4.0 PROJECT IMPACTS

4.1 INTRODUCTION

The determination of impacts in this analysis is based on a comparison of maps depicting project grading limits and maps of onsite biological resources. All construction activities, including staging and equipment areas, are assumed to be contained within the limits of grading. Both direct and indirect impacts on biological resource have been evaluated. Direct impacts are those that involve the initial loss of habitats due to grading and construction. Indirect impacts are those that would be related to disturbance from construction activities (e.g., noise, dust) and use of the project site.

Biological impacts associated with the proposed project were evaluated with respect to the following special status biological issues:

- Federally- or state-listed Endangered or Threatened species of plant or wildlife;
- Non-listed species that meet the criteria in the definition of Rare or Endangered in the California Environmental Quality Act (CEQA) Guidelines;
- Streambeds, wetlands, and their associated vegetation;
- Habitats suitable to support a federally- or state-listed Endangered or Threatened species of plant or wildlife;
- Species designated as California Species of Special Concern or federal Species of Concern;
- Habitat, other than wetlands, considered special status by regulatory agencies (USFWS, CDFG) or resource conservation organizations; and
- Other species or issues of concern to regulatory agencies or conservation organizations.

The actual and potential occurrence of these resources within the project site was correlated with the following significance criteria to determine whether the impacts of the proposed project on these resources would be considered significant.

4.2 SIGNIFICANCE CRITERIA

Appendix G of the CEQA Guidelines contains the Initial Study Environmental Checklist form which includes questions relating to biological resources. The issues presented in the Initial Study Checklist have been utilized as thresholds of significance in this Section. Accordingly, a project may create a significant environmental impact if one or more of the following occurs:

- If the project has a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the CDFG or USFWS.
- If the project has a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the CDFG or USFWS.
- If the project has a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh,

vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means.

- If the project interferes substantially with the movement of any native or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impedes the use of native wildlife nursery sites.

- If the project conflicts with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance.

- If the project conflicts with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan.

Section 15065(a), *Mandatory Findings of Significance*, of the CEQA Guidelines states that a project may have a significant effect on the environment if "...the project has the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of an endangered, rare or threatened species..."

An evaluation of whether an impact on biological resources would be substantial must consider both the resource itself and how that resource fits into a regional or local context. Substantial impacts would be those that would substantially diminish, or result in the loss of, an important biological resource or those that would obviously conflict with local, State or Federal resource conservation plans, goals, or regulations. Impacts are sometimes locally adverse but not significant because, although they would result in an adverse alteration of existing conditions, they would not substantially diminish or result in the permanent loss of an important resource on a population- or region-wide basis.

Section 15380 of CEQA indicates that a lead agency can consider a non-listed species to be Rare or Endangered for the purposes of CEQA if the species can be shown to meet the criteria in the definition of Rare or Endangered. For the purposes of this discussion, the current scientific knowledge on the population size and distribution for each special status species was considered according to the definitions for Rare and Endangered listed in Section 15380 of CEQA.

The actual and potential occurrence of these resources within the project vicinity was correlated with the previously identified significance criteria to determine whether the impacts of the proposed project on these resources would be significant.

Potential impacts are grouped below according to topic. The numbered mitigation measures at the end of this section directly correspond with the numbered impact statements.